

22. Waterways, Water Traffic, and Shipping

(Sent to print May 7, 1952)

Data in this section vary as to area coverage, the variation depending upon the source of compilation. The data from Corps of Engineers, Department of Army, are for continental United States and territories and possessions; data from Bureau of Census, and Bureau of Customs are for United States customs area which includes Alaska, Hawaii, and Puerto Rico and from 1935 through 1939, Virgin Islands; data from Maritime Administration and War Shipping Administration are for continental United States.

Units of measurement.—"Cargo tonnage" represents weight of cargo in long tons (2,240 pounds) or short tons (2,000 pounds). All other tonnage figures refer to capacity of vessels. The terms gross and net tonnage refer to space measurement, 100 cubic feet being called 1 ton. Gross tonnage is the capacity of the entire space within the frames and the ceiling of the hull, together with those closed-in spaces above deck available for cargo, stores, passengers or crew, with certain minor exemptions. Net or registered tonnage is what remains after deducting from the gross tonnage the spaces occupied by the propelling machinery, fuel, crew quarters, master's cabin, and navigation spaces. It represents substantially space available for cargo and passengers. The net tonnage capacity of a ship recorded as "entered with cargo" may bear little relation to actual weight of cargo. Dead weight tonnage is the weight in long tons required to depress a vessel from light water line (that is, with only the machinery and equipment on board) to load line. It is therefore the weight of the cargo, fuel, etc., which a vessel is designed to carry with safety. Displacement tonnage (naval vessels) has reference to weight of the vessel itself with its normal equipment, fuel, etc.

Types of vessel shipments.—Shipments by dry cargo vessels include shipments on all types of watercraft except tanker vessels, and shipments by tanker vessels include all types of cargo both liquid and dry carried by tanker vessels.

Vessel entrances and clearances.—The tables on vessel entrances and clearances show the number and net registered tonnage of American and foreign dry cargo and tanker vessels with cargo and in ballast entering and clearing the United States customs area in the foreign trade and indicate the customs districts at which these vessels first entered and from which they last cleared. With minor exceptions, all types of watercraft engaged in the foreign trade which are required to make formal entrance and clearance under United States customs regulations are included in the statistics. Army and Navy vessels entering or clearing without commercial cargo are not included in the figures. The tons shown in tables 661-666 are net tons of 100 cubic feet carrying capacity of the vessels (as defined in Part 16 of Title 46, "Code of Federal Regulations, Measurements of Vessels") and do not represent the actual weight of cargo carried.

A vessel is reported as entered at the first port in the United States at which entry is made, regardless of whether any cargo is unladen at that port. A vessel is reported as cleared from the last port where outward cargo is completed or where the vessel cleared in ballast.

Vessels touching at a United States port in distress, or for other temporary causes without discharging cargo are not included in the figures.

Historical statistics.—See preface and historical appendix. Tabular headnotes (as "See also *Historical Statistics*, series K 132-145") provide cross-references, where applicable, to *Historical Statistics of the United States, 1789-1945*.

No. 647.—WATER-BORNE COMMERCE OF THE UNITED STATES—CARGO TONNAGE,
FOREIGN AND DOMESTIC: 1945 TO 1950[In thousands of short tons of 2,000 pounds. See also *Historical Statistics*, series K 132-145]

CLASS	1945	1946	1947 ¹	1948 ¹	1949 ¹	1950 ¹
Foreign commerce, total	172,094	148,877	188,256	162,971	165,358	169,225
Imports, through seaports	44,526	47,948	57,366	68,078	77,153	96,299
Exports, through seaports	100,333	76,589	101,996	65,404	65,740	43,040
Imports, Great Lakes ports	6,511	4,163	4,796	4,210	4,839	5,083
Exports, Great Lakes ports	20,724	20,177	24,098	25,270	17,626	23,603
Domestic commerce, unadjusted total	698,188	729,926	(1)	(1)	(1)	(1)
Coastwise, between ports	90,705	137,000	153,008	174,081	161,431	182,544
Great Lakes, between ports	157,900	138,617	163,180	172,491	145,592	139,881
Local traffic of seaports and Great Lakes ports	97,822	91,225	112,008 ²	113,059 ²	102,637 ²	100,906
Traffic between ports and river points ³	87,073	81,668	140,615	169,608	165,703	190,789
Traffic between ports of territories and possessions of the United States ⁴						1,239
Traffic on rivers, canals, and connecting channels ⁵	261,688	280,807				
Foreign and domestic, unadjusted total	870,282	878,803	(1)	(1)	(1)	(1)
Deductions of duplications:						
Traffic between seaports and river points	87,073	81,668	(1)	(1)	(1)	(1)
Other duplications (canals, etc.) ⁶	164,363	180,103	(1)	(1)	(1)	(1)
Net total, foreign and domestic	618,906	617,032	766,817	793,200	740,721	820,584
Approximate net total, domestic	7446,812	7468,155	578,561	630,229	575,363	651,359

¹ Figures are net for each type of traffic; no adjustments required to arrive at net totals.² Represents traffic local to seaports, Great Lakes ports, and communities utilizing inland waterways.³ Represents traffic among ports and communities utilizing inland waterways exclusively.⁴ Included in other types of domestic traffic prior to 1950.⁵ Excluding St. Marys Falls Canal traffic and additional Detroit River traffic, data for which are already included in figures for Great Lakes traffic; also excluding duplications relating to rivers and canals themselves.⁶ Principally coastwise and lake traffic passing through canals and connecting channels other than the St. Marys Falls Canal and Detroit River.⁷ Estimated from figures in this table on assumption that all deductions represent duplications in domestic traffic; includes some minor duplications in figures for foreign traffic.Source: Department of the Army, Corps of Engineers, *Annual Report of Chief of Engineers*, Part II, except for 1950 data, which are preliminary.No. 648.—ESTIMATED EMPLOYMENT ON AMERICAN FLAG MERCHANT VESSELS:
1929 to 1951

[Represents personnel employed on active steam and motor merchant vessels of 1,000 gross tons and over, engaged in deep-sea trades (overseas foreign, nearby foreign, intercoastal, and coastwise). Includes only freight, combination passenger and freight, and tanker vessels]

YEAR	Average monthly employment ¹	YEAR	Average monthly employment ¹	DATE	Number employed ¹
1929	63,825	1938	50,905	Dec. 31, 1947	118,500
1930	62,360	1939	52,445	June 30, 1948	94,900
1931	57,180	1940	60,975	Dec. 31, 1948	78,200
1932	52,600	1941	50,225	June 30, 1949	78,200
1933	54,620	1942	47,650	Dec. 31, 1949	65,650
1934	56,295	1943	76,800	June 30, 1950	61,550
1935	56,575	1944	125,755	Dec. 31, 1950	68,050
1936	53,025	1945	158,755	June 30, 1951	84,300
1937	57,170	1946	127,175	Dec. 31, 1951	97,630

¹ Includes masters of vessels; excludes personnel employed on vessels under bareboat charter, or vessels owned by Army or Navy.

Source: Department of Commerce, Maritime Administration; records.

No. 649.—WATER-BORNE IMPORTS AND EXPORTS—CARGO TONNAGE, BY FLAG OF CARRIER VESSEL, 1921 TO 1951, AND BY COASTAL DISTRICTS, 1945 TO 1951

[In cargo tons of 2,240 pounds. Excludes cargoes (small in aggregate) carried by ships of less than 100 tons gross capacity prior to 1946.]

YEAR AND DISTRICT	IMPORTS BY FLAGS OF CARRIER VESSELS			EXPORTS BY FLAGS OF CARRIER VESSELS		
	Total	American	Foreign	Total	American	Foreign
Total:						
1921	33,184,790	23,454,831	9,729,959	48,640,044	18,557,464	30,082,580
1925	43,135,154	21,214,626	21,920,528	49,666,499	15,716,692	33,949,807
1930	47,562,416	24,822,560	22,739,856	49,730,870	14,913,598	37,817,272
1931	35,864,286	17,114,174	18,750,112	40,049,246	11,068,254	28,980,062
1932	28,710,280	13,324,024	15,385,978	31,844,566	8,147,086	23,697,480
1933	26,566,967	11,017,462	15,549,505	32,385,550	8,354,909	24,030,641
1934	29,813,903	12,767,083	17,046,820	37,821,061	9,435,147	28,385,914
1935	33,965,678	14,125,363	19,840,315	38,145,865	8,740,017	29,405,848
1936	38,395,748	18,196,753	25,198,995	39,714,046	8,615,976	31,098,246
1937	42,062,821	13,363,422	28,699,399	54,557,725	10,882,780	43,674,945
1938	32,818,162	12,077,522	20,740,640	55,612,107	10,358,773	45,253,334
1939	37,548,452	11,124,084	26,424,366	55,080,843	9,425,952	45,660,891
1940	39,881,161	15,465,891	24,415,270	54,401,306	11,553,124	42,848,182
1942 ¹	24,458,000	15,535,000	8,923,000	37,205,000	14,488,000	22,717,000
1943 ¹	27,668,000	22,080,000	5,579,000	42,647,000	22,591,000	20,056,000
1944 ¹	29,750,000	23,401,000	6,349,000	49,299,000	30,359,000	18,940,000
1945 ¹	35,202,000	28,049,000	7,163,000	55,003,000	33,687,000	21,316,000
1946 ¹	43,014,094	28,874,571	15,039,523	77,716,542	44,403,070	33,253,472
1947 ¹	52,860,000	33,645,000	19,215,000	110,997,000	54,520,000	56,477,000
1948 ¹	60,192,997	36,185,590	24,007,407	78,849,620	30,804,647	48,044,973
1949 ²	69,081,139	36,932,206	32,148,933	64,164,776	23,335,624	40,820,152
1950 ²	86,342,305	37,739,650	48,602,655	55,960,164	18,195,757	37,773,407
1951 ²	89,769,101	38,224,894	51,544,207	103,253,075	(3)	(3)
Dry cargoes:						
1945 ¹	19,389,000	15,226,000	4,163,000	30,983,000	24,707,000	12,228,000
1946 ²	22,606,662	12,730,414	9,876,248	44,160,404	39,050,784	25,109,620
1947 ²	28,634,000	15,492,000	13,142,000	97,035,000	49,772,000	47,863,000
1948 ²	32,732,094	15,359,212	17,372,882	67,702,862	27,283,247	40,419,615
1949 ²	35,023,498	12,672,750	22,350,748	55,019,687	19,942,857	35,076,830
1950 ²	41,616,924	13,234,760	28,382,164	47,837,917	14,689,123	33,168,794
1951 ²	44,658,792	15,880,043	28,778,149	90,412,033	(3)	(3)
Tanker cargoes:						
1945 ¹	15,813,000	12,823,000	2,990,000	18,068,000	8,980,000	9,058,000
1946 ²	21,307,432	16,144,157	5,163,275	13,556,138	5,412,286	8,143,852
1947 ²	24,226,000	18,153,000	6,073,000	13,362,000	4,749,000	8,614,000
1948 ²	27,460,903	20,826,378	6,634,525	11,146,758	3,521,399	7,625,359
1949 ²	34,057,641	24,239,450	9,798,185	9,145,089	3,392,767	5,752,322
1950 ²	44,725,381	24,504,890	20,220,491	8,131,247	3,526,634	4,604,613
1951 ²	45,110,309	22,344,251	22,766,058	12,841,043	(3)	(3)
Atlantic ports:						
1945 ¹	27,454,000	21,887,000	5,507,000	35,365,000	20,661,000	14,704,000
1946 ²	34,353,241	23,792,915	10,560,326	33,574,089	22,412,865	11,161,224
1947 ²	40,704,000	(3)	(3)	57,031,000	(3)	(3)
1948 ²	46,743,960	(3)	(3)	32,225,600	(3)	(3)
1949 ²	52,052,017	(3)	(3)	25,373,754	(3)	(3)
1950 ²	67,912,822	(3)	(3)	13,596,490	(3)	(3)
1951 ²	69,706,081	(3)	(3)	48,830,700	(3)	(3)
Gulf ports:						
1945 ¹	5,067,000	4,124,000	943,000	13,158,000	9,137,000	4,021,000
1946 ²	3,915,955	2,763,806	1,152,149	20,073,599	12,552,943	7,520,666
1947 ²	6,239,000	(3)	(3)	23,922,000	(3)	(3)
1948 ²	7,310,684	(3)	(3)	18,061,724	(3)	(3)
1949 ²	9,463,434	(3)	(3)	16,996,765	(3)	(3)
1950 ²	9,759,324	(3)	(3)	15,016,177	(3)	(3)
1951 ²	9,725,225	(3)	(3)	19,983,671	(3)	(3)
Pacific ports:						
1945 ¹	2,681,000	2,038,000	643,000	6,480,000	3,880,000	2,501,000
1946 ²	2,140,427	1,489,510	650,917	8,400,909	4,223,500	2,237,409
1947 ²	2,189,000	(3)	(3)	9,297,000	(3)	(3)
1948 ²	2,628,805	(3)	(3)	6,222,034	(3)	(3)
1949 ²	3,252,244	(3)	(3)	6,071,153	(3)	(3)
1950 ²	3,655,037	(3)	(3)	6,490,791	(3)	(3)
1951 ²	4,220,375	(3)	(3)	13,334,199	(3)	(3)
Great Lakes ports:						
1948 ¹	3,500,547	(3)	(3)	22,340,262	(3)	(3)
1949 ²	4,313,444	(3)	(3)	15,723,104	(3)	(3)
1950 ²	5,014,122	(3)	(3)	20,865,706	(3)	(3)
1951 ²	6,057,419	(3)	(3)	21,104,506	(3)	(3)

¹ Excludes U. S. Army, Navy cargo, and Great Lakes.

² Excludes U. S. Army and Navy cargo. Includes Alaska, Hawaii, and Puerto Rico. Beginning July 1950, excludes commodities classified for security reasons as "special category." 1947-51 data subject to revision.

³ Not available.

No. 650.—WATER-BORNE IMPORTS—SHIPPING WEIGHT ON DRY CARGO AND TANKER VESSELS, BY TRADE AREA: 1948, 1949, AND 1950

[In millions of pounds. Represents general imports. Totals represent sums of unrounded figures; may vary from sums of rounded amounts. See 1951 Abstract, table 641, for latest data available by countries]

TRADE AREA	1948 ¹			1949 ¹			1950 ¹		
	Total	On American vessels	Percent American	Total	On American vessels	Percent American	Total	On American vessels	Percent American
DRY CARGO									
Trade area, total	73,319.6	34,404.6	46.9	78,452.6	28,387.0	36.2	93,221.9	29,645.9	31.8
Foreign except Canadian	56,081.5	30,852.3	55.0	58,947.0	24,471.7	41.5	68,842.5	26,403.7	38.3
Caribbean	15,659.4	7,827.9	50.0	15,271.9	3,990.5	26.1	15,578.7	3,583.5	23.0
East Coast South America	4,528.6	2,450.3	54.2	4,430.7	1,958.4	44.1	5,220.0	1,893.6	36.2
West Coast South America	9,603.6	8,180.8	84.9	9,550.4	7,537.0	78.9	9,259.4	7,844.9	84.7
West Coast Central America and Mexico	1,416.1	1,057.7	74.7	1,611.7	1,228.1	76.2	1,708.4	1,221.0	69.0
Gulf Coast Mexico	559.5	140.9	25.2	572.6	167.5	29.3	785.7	231.7	29.4
United Kingdom and Eire	1,035.2	369.6	35.7	875.2	296.6	33.9	1,706.6	627.0	35.4
Baltic, Scandinavia, Iceland and Greenland	5,325.1	1,486.0	27.9	6,174.8	1,498.0	24.3	7,138.1	1,505.4	21.0
Bayonne-Hamburg Range	1,920.6	771.3	40.2	3,016.0	624.6	20.7	6,389.9	1,684.6	26.3
Portugal and Spanish Atlantic	523.4	194.6	37.2	384.2	118.7	30.9	547.5	190.3	34.7
Azores, Mediterranean, and Black Sea	4,392.5	1,785.7	40.7	3,100.1	884.5	28.4	4,100.8	1,023.8	24.0
West Coast Africa	1,144.9	354.8	31.0	1,635.7	365.8	22.4	2,115.9	478.8	22.6
South and East Africa	1,719.9	1,551.6	90.2	2,000.0	1,276.1	68.8	2,830.2	1,354.9	47.8
Australasia	645.2	413.3	64.1	566.5	215.4	38.0	640.1	224.0	34.9
India, Persian Gulf, and Red Sea	2,279.6	1,195.3	52.4	2,863.6	1,004.4	35.1	3,302.4	991.4	30.0
Straits Settlements and Netherlands East Indies	2,021.8	1,373.5	67.9	2,475.7	1,350.3	54.5	2,436.1	1,306.7	53.6
South China, Formosa, and Philippines	2,866.4	1,455.9	50.8	3,672.3	1,676.1	45.6	3,800.4	1,633.5	42.9
North China including Shanghai and Japan	444.8	273.1	61.4	730.6	179.5	24.6	1,162.2	608.6	52.3
Canadian	17,238.0	3,552.3	20.6	19,505.6	3,915.2	20.1	24,379.4	3,242.1	13.2
Pacific Canada	2,492.6	1,142.0	45.8	2,948.6	1,128.5	38.3	4,733.2	1,270.3	27.0
Great Lakes Canada	6,817.1	1,120.8	16.4	8,925.3	2,091.3	23.4	9,884.1	1,436.0	14.5
Atlantic Canada and Newfoundland	7,928.4	1,289.6	16.3	7,631.8	695.4	9.1	9,762.2	526.8	5.3
TANKER CARGO									
Trade area, total	61,512.3	46,651.1	75.8	76,289.1	54,341.2	71.2	100,184.9	54,891.0	54.7
Foreign except Canadian	61,431.6	46,586.8	75.8	76,128.4	54,223.5	71.2	100,158.3	54,875.7	54.7
Caribbean	52,030.2	39,979.5	76.8	61,013.7	45,838.0	75.1	80,851.4	48,391.8	59.8
East Coast South America	8	25.0	—	296.0	241.6	81.6	(2)	(2)	100.0
West Coast South America	—	—	—	—	—	4.1	—	—	—
West Coast Central America and Mexico	17.0	2,152.7	74.6	8.4	1,856.9	60.0	22.8	15.6	68.0
Gulf Coast Mexico	307.4	79.5	25.8	203.2	62.4	30.7	5,094.5	3,703.0	61.7
United Kingdom and Eire	—	—	—	—	—	—	270.2	67.4	24.3
Baltic, Scandinavia, Iceland, and Greenland	28.0	87.1	4.8	34.8	81.0	7.5	140.3	29.9	21.3
Bayonne-Hamburg Range	—	—	—	(2)	—	—	297.1	129.7	43.0
Portugal and Spanish Atlantic	—	—	—	—	—	—	2.9	—	—
Azores, Mediterranean, and Black Sea	179.1	86.5	48.3	347.5	197.0	56.7	333.0	—	—
West Coast Africa	—	—	—	1.6	(2)	2.7	—	—	—
South and East Africa	—	—	—	—	—	—	—	—	—
Australasia	4.0	4.0	100.0	(2)	—	—	—	—	—
India, Persian Gulf, and Red Sea	6,600.2	4,826.2	73.1	11,048.5	6,020.0	54.5	12,232.6	2,534.6	20.7
Straits Settlements, Netherlands East Indies	(2)	—	—	.1	.1	100.0	(2)	(2)	100.0
South China, Formosa, and Philippines	(2)	—	—	(2)	(2)	100.0	—	—	—
North China including Shanghai and Japan	80.8	64.3	79.6	160.7	117.7	73.2	3.5	3.5	99.9
Canadian	(2)	—	—	—	—	—	26.6	15.3	57.3
Pacific Canada	73.9	64.3	87.0	13.4	2.0	14.9	5.0	4.9	98.0
Great Lakes Canada	6.9	—	—	139.9	115.7	82.7	8.1	8.1	100.0
Atlantic Canada and Newfoundland	—	—	—	7.4	(2)	(2)	13.5	2.3	16.6

¹ Preliminary. ² Less than 50,000 pounds. ³ Less than 0.05 percent

No. 651.—WATER-BORNE EXPORTS—SHIPPING WEIGHT ON DRY CARGO AND TANKER VESSELS, BY TRADE AREA: 1948, 1949, AND 1950

[In millions of pounds. Covers domestic and foreign merchandise. Totals represent sums of unrounded figures may vary from sums of rounded amounts. See 1951 *Abstract*, table 641, for latest data available by countries]

TRADE AREA	1948 ¹			1949 ¹			1950 ¹		
	Total	On Ameri-can vessels	Percent Ameri-can	Total	On Ameri-can vessels	Percent Ameri-can	Total	On Ameri-can vessels	Percent Ameri-can
DRY CARGO									
Trade area, total.....	151,654.4	61,114.5	40.3	123,244.1	44,672.0	36.2	107,156.9	32,858.8	30.7
Foreign except Canadian.....	102,838.0	47,736.0	46.4	88,773.3	34,700.4	39.1	61,277.3	22,018.5	35.9
Caribbean.....	9,069.6	5,530.7	61.0	8,796.7	4,095.7	46.6	8,127.9	3,255.8	40.1
East Coast South America.....	8,316.5	2,549.0	30.6	3,997.5	1,104.5	27.6	4,971.7	1,101.1	22.1
West Coast South America.....	1,811.0	1,061.6	58.6	2,192.0	1,049.6	47.9	1,779.8	698.8	39.3
West Coast Central America and Mexico.....	276.0	157.4	57.0	235.8	131.0	55.6	246.6	129.2	52.4
Gulf Coast Mexico.....	620.2	197.4	31.8	539.9	187.7	34.8	922.2	282.4	30.4
United Kingdom and Eire.....	4,102.6	1,192.4	29.1	5,692.3	1,793.9	31.5	5,786.4	2,122.7	36.7
Baltic, Scandinavia, Iceland, and Greenland.....	3,658.7	747.9	20.4	4,430.4	1,180.2	26.8	2,675.8	696.1	26.0
Bayonne-Hamburg Range.....	35,370.4	17,548.6	49.6	23,880.8	7,952.0	33.3	14,182.6	5,319.5	37.6
Portugal and Spanish Atlantic Azores, Mediterranean, and Black Sea.....	1,440.0	83.5	5.8	1,240.0	.28.8	2.3	877.5	258.1	29.4
21,700.3	11,040.8	50.7	18,523.6	10,237.5	55.3	8,503.2	2,907.2	34.2	
1,277.7	379.8	29.7	1,307.6	306.5	30.3	788.0	222.8	28.4	
2,732.4	1,578.1	57.8	2,307.1	907.0	39.3	1,207.4	496.2	41.1	
Australasia.....	1,314.6	319.3	24.3	1,824.5	366.4	20.1	1,207.5	253.1	21.0
India, Persian Gulf, and Red Sea.....	4,475.5	1,861.4	41.6	4,143.5	1,380.4	33.5	3,059.6	752.5	24.6
Straits Settlements, and Netherlands East Indies.....	929.1	344.2	37.0	1,025.0	412.1	40.2	574.2	253.2	44.1
South China, Formosa, and Philippines.....	2,902.1	1,655.7	57.1	3,824.4	2,113.0	55.3	2,742.7	1,400.9	51.1
North China, incl. Shanghai and Japan.....	2,751.2	1,479.2	53.8	4,812.3	1,346.3	28.0	3,672.1	1,868.9	50.9
Canadian.....	48,816.5	13,378.5	27.4	34,470.8	9,971.6	28.9	45,879.7	10,840.4	23.6
Pacific Canada.....	363.2	137.2	37.8	482.2	187.5	38.9	533.4	195.8	36.7
Great Lakes Canada.....	45,245.2	13,109.0	29.0	31,865.5	9,772.1	30.7	42,429.1	10,043.3	25.1
Atlantic Canada and Newfoundland.....	3,208.1	132.2	4.1	2,123.1	12.0	.6	2,917.2	1.3	(*)
TANKER CARGO									
Trade area, total.....	24,968.8	7,887.9	31.6	20,485.0	7,599.8	37.1	18,214.0	7,899.7	43.4
Foreign except Canadian.....	14,848.7	3,710.6	25.0	12,226.8	4,245.5	34.7	9,682.3	4,022.4	41.5
Caribbean.....	2,619.6	1,154.2	44.1	2,560.4	1,320.8	51.6	2,320.2	1,533.2	66.1
East Coast South America.....	831.1	445.0	53.5	454.4	173.8	38.2	310.1	87.4	28.2
West Coast South America.....	118.0	68.5	49.6	438.9	68.4	15.6	757.3	246.4	32.5
West Coast Central America and Mexico.....	932.4	454.8	48.8	724.0	255.9	35.3	1,428.3	380.5	26.6
Gulf Coast Mexico.....	6.4	2.6	40.6	59.4	15.7	26.4	34.6	11.9	34.4
United Kingdom and Eire.....	4,507.5	570.6	12.5	3,650.6	1,125.6	30.8	2,088.7	433.6	20.8
Baltic, Scandinavia, Iceland, and Greenland.....	1,404.5	116.5	8.3	1,106.9	241.2	20.2	543.4	267.7	49.3
Bayonne-Hamburg Range.....	2,242.9	448.8	20.0	1,452.6	673.6	46.4	987.6	564.1	57.1
Portugal and Spanish Atlantic Azores, Mediterranean, and Black Sea.....	156.8	26.2	16.7	122.1	-----	-----	46.4	-----	-----
248.8	157.3	32.5	561.4	214.7	38.2	739.3	361.1	48.8	
213.5	67.8	31.8	196.7	20.1	10.2	920.0	71.7	78.0	
(*)	(*)	(*)	(*)	(*)	(*)	100.0	32.0	31.8	
486.1	67.8	13.9	371.8	135.3	36.4	100.4	2.5	10.6	
India, Persian Gulf, and Red Sea.....	.7	(*)	(*)	30.2	.2	.7	.1	.1	75.2
Straits Settlements, Netherlands East Indies.....	-	-	-	31.9	-	(*)	-	-	-
South China, Formosa, and Philippines.....	395.7	90.7	22.9	249.7	-	-	46.3	-	-
North China, incl. Shanghai and Japan.....	389.7	49.9	12.8	124.7	2	.2	164.2	30.1	18.3
Canadian.....	10,120.1	4,177.4	41.3	8,258.2	3,354.3	40.6	8,531.7	3,877.3	45.4
Pacific Canada.....	3,879.8	1,700.6	43.8	3,635.5	1,690.9	46.5	4,221.7	2,111.8	50.0
Great Lakes Canada.....	5,223.7	1,842.0	35.3	3,733.5	933.8	25.0	3,845.6	1,382.3	35.9
Atlantic Canada and Newfoundland.....	1,016.6	634.8	62.4	889.3	729.6	82.0	464.3	383.2	82.5

¹ Preliminary. ² Less than 50,000 pounds. ³ Less than 0.05 percent.

No. 652.—COMMERCE OF PRINCIPAL UNITED STATES OCEAN PORTS: 1950

[In thousands of short tons of 2,000 pounds. In addition to commerce here shown, many ports have (1) commerce with ports on internal rivers and canals; (2) purely local port traffic, including, for New York and San Francisco, what is called intraport traffic between parts of a harbor for which separate statistics are maintained. These forms of traffic, although aggregate tonnage is large, are of much less economic importance than foreign and coastwise traffic.]

PORT	Im- ports	Ex- ports	COASTWISE		PORT	Im- ports	Ex- ports	COASTWISE	
			Re- ceipts	Ship- ments				Re- ceipts	Ship- ments
Total ¹	96,299	43,640	182,470	182,517	GULF PORTS—continued				
ATLANTIC PORTS					Terrebonne Bay, La.				
Searsport Harbor, Maine.	159	225	300	2	Beaumont, Tex. (Neches River)	9	501	2,227	14,967
Portland Harbor, Maine.	4,610	106	2,598	471	Port Arthur, Tex.	58	1,060	2,598	12,479
Portsmouth Harbor, N. H.	121		657	1	Galveston, Tex.	308	4,132	63	1,432
Salem Harbor, Mass.			256		Texas City, Tex.	41	56	794	6,768
Lynn Harbor, Mass.	1		111	18	Houston, Tex.	2,106	4,078	1,091	10,904
Boston, Mass.	5,299	239	11,099	1,008	Freeport, Tex.	143	57		876
New Bedford and Fairhaven Harbor, Mass.	6	1	412	38	Port Aransas, Tex.		107		9,462
Fall River Harbor, Mass.	243		1,304	114	Corpus Christi, Tex.	230	208	23	7,619
Providence River and Harbor, R. I.	828		6,124	513	Brazos Island Harbor, Tex.	302	281	22	465
New London, Conn.	257		236	148	PACIFIC PORTS				
New Haven Harbor, Conn.	715		3,547	747	Los Angeles Harbor, Calif.	902	1,567	4,728	12,085
Bridgeport Harbor, Conn.	219		1,724	318	Long Beach Harbor, Calif.	306	1,403	985	2,270
Norwalk Harbor, Conn.			238		San Diego, Calif.	15	1	940	27
Stamford Harbor, Conn.			389	43	El Segundo, Calif.		75	187	2,509
New York Harbor, N. Y.	25,481	7,001	45,392	8,729	Santa Monica Bay, Calif.		54	13	1,694
Hempstead Harbor, N. Y.			917	2,449	Ventura Harbor, Calif.	1		33	393
Huntington Harbor, N. Y.					Elliwood, Calif.		113	146	3,361
			113	1,335	San Luis Obispo Harbor, Calif.		706		3,165
Port Jefferson Harbor, N. Y.			274	247	Estero Bay, Calif.	1,041	1,742	11,739	9,576
Albany, N. Y.	222	388	2,092	14	San Francisco Bay, Calif.		5	177	41
Northport Bay and Harbor, N. Y.			13	2,285	Humboldt Harbor and Bay, Calif.			258	
Delaware River and tributaries.	23,587	1,564	21,109	7,184	Moss Landing Harbor, Calif.	3	200	21	177
Baltimore Harbor and Channels, Md.	12,144	2,915	7,478	1,765	Stockton, Calif.		157	125	645
Hampton Roads, Va.	1,837	2,637	4,481	11,137	Coos Bay, Oreg.	78	722	6,078	521
Morehead City, N. C.	123		176		Portland, Oreg.	14	135	135	7
Wilmington, N. C.	187	22	2,809	4	Astoria, Oreg.		190	35	116
Charleston Harbor, S. C.	885	130	1,788	168	Vancouver, Wash.	15	260	147	209
Savannah Harbor, Ga.	1,410	248	1,578	53	Longview, Wash.		37	228	210
Jacksonville, Fla.	677	128	2,337	153	Grays Harbor and Chehalis River, Wash.	499	309	822	325
Palm Beach Harbor, Fla.	153	261	80		Tacoma Harbor, Wash.	352	488	5,295	733
Port Everglades, Fla.	311	127	1,117	66	Seattle Harbor, Wash.	274	16	31	25
Miami Harbor, Fla.	348	39	431	3	Bellingham Bay and Harbor, Wash.		97	14	124
San Juan Harbor, P. R.	457	148	1,230	536	Port Angeles, Wash.	215	2	32	105
Mayaguez Harbor, P. R.	50	43	151	188	Port Townsend Harbor, Wash.	110	14	173	33
Ponce Harbor, P. R.	116	233	179	142	Everett Harbor, Wash.			282	3
GULF PORTS					Whittier, Alaska			215	96
Charlotte Harbor, Fla.		136		788	Ketchikan Harbor, Alaska			389	40
Tampa Harbor, Fla.	203	1,665	3,034	1,512	Seward Harbor, Alaska	78	10	1,739	984
Port St. Joe Harbor, Fla.	14	3	1,787		Honolulu Harbor, T. H.	14	2	260	462
Panama City Harbor, Fla.					Hilo Harbor, T. H.	9		170	451
	57	43	334	92	Kahului Harbor, Maui, T. H.		8	60	175
Mobile, Ala.	2,199	406	454	859	Port Allen Harbor, T. H.				
Gulfport Harbor, Miss.	821	18	20	3	Pearl Harbor, Oahu, T. H.				
New Orleans, La.	3,619	4,620	1,440	8,109					
Baton Rouge, La.	687	489	328	4,001					
Lake Charles, La. ²	23	532	11	6,477					

¹ Includes data for ports not shown separately.

² Including Calcasieu River and Pass.

No. 653.—COMMERCE OF PRINCIPAL GREAT LAKES PORTS: 1947 TO 1950

[In thousands of short tons of 2,000 pounds. Foreign imports and exports, lakewise receipts and shipments, and coastwise receipts and shipments only are included]

PORT	RECEIPTS				SHIPMENTS			
	1947	1948	1949	1950	1947	1948	1949	1950
Total.....	167,989	176,741	150,471	175,637	187,280	197,767	163,244	193,511
Agate Bay (Two Harbors), Minn.....	212	217	177	216	18,811	20,787	16,369	18,948
Alabaster, Mich.....					423	539	535	638
Alpena Harbor, Mich.....	285	364	400	442	2,064	2,049	2,082	2,352
Ashland Harbor, Wis.....	830	840	515	685	5,825	5,871	4,728	5,422
Ashtabula, Ohio.....	10,275	11,622	8,995	10,447	4,719	4,897	2,437	3,302
Buffalo, N. Y.....	16,760	16,904	16,122	16,458	1,061	1,804	2,229	2,417
Buffington, Ind.....	825	993	1,020	1,019	99	108	91	121
Caledite, Mich.....	136	132	89	150	12,065	13,099	11,856	14,018
Chicago, Ill. ¹	14,513	14,771	12,570	15,813	3,430	3,032	3,427	4,008
Cleveland, Ohio.....	16,777	17,062	15,323	17,875	2,202	1,611	698	382
Conneaut Harbor, Ohio.....	12,311	12,937	10,870	9,562	3,221	3,081	1,909	2,522
Detour, Mich.....	2 ² 526	501	382	523	2 ² 597			
Detroit, Mich.....	16,907	18,040	16,067	21,090	727	751	1,314	1,298
Drummond Island, Mich.....	(2)	7	8	8	(2)	972	1,452	1,615
Duluth-Superior, Minn. and Wis.....	10,939	11,319	6,694	10,117	53,452	57,866	49,951	53,009
Erie Harbor, Ohio.....	5,563	4,705	4,393	4,840	1,673	2,047	1,718	2,276
Escanaba Harbor, Mich.....	364	431	205	372	4,501	5,270	4,233	5,561
Fairport, Ohio.....	1,265	1,284	975	972	1,290	1,767	1,082	1,207
Frankfort Harbor, Mich.....	1,228	1,207	896	1,071	623	668	587	882
Gary Harbor, Ind.....	8,636	8,297	8,406	9,182	143	160	97	171
Grand Haven Harbor and Grand River, Mich.....	128	125	156	135	771	911	921	798
Great Sodus Bay, N. Y.....					2,022	2,111	1,383	2,151
Green Bay, Wis.....	3,218	3,451	2,517	3,244	5	4	4	8
Holland, Mich.....	194	205	221	231				
Huron Harbor, Ohio.....	1,220	1,025	1,642	1,468	1,303	1,614	1,106	1,810
Indiana Harbor, Ind.....	9,092	9,483	8,779	10,355	3,965	4,299	5,168	5,182
Keweenaw Harbor, Wis.....	379	389	354	455	633	624	549	571
Lorain Harbor, Ohio.....	8,003	9,137	7,086	8,153	3,037	3,671	2,518	3,264
Ludington, Mich.....	1,814	1,862	1,654	1,681	1,387	1,551	1,206	1,726
Manistee Harbor, Mich.....	240	224	192	200	689	590	682	819
Manistique Harbor, Mich.....	95	110	72	136	274	277	184	233
Manitowoc Harbor, Wis.....	1,132	1,241	1,063	1,498	968	953	825	944
Marblehead, Ohio.....					1,156	1,107	1,020	1,091
Marquette Harbor, Mich.....	218	222	136	214	580	486	513	688
Marysville, Mich.....	722	793	758	919	18	9	27	16
Menominee Harbor and River, Mich. and Wis.....	784	848	491	881	192	88	76	82
Milwaukee Harbor, Wis.....	6,600	7,021	5,538	7,357	1,803	1,564	1,522	1,421
Muskegon Harbor, Mich.....	1,446	1,623	1,727	2,124	1,046	1,028	985	1,220
Ogdensburg, N. Y.....	247	263	218	368	278	270	179	249
Oswego, N. Y.....	1,075	1,457	1,379	1,267	984	903	346	809
Port Huron, Mich.....	505	508	524	554		5	4	10
Port Inland Harbor, Mich.....	2	1		2	3,863	3,993	4,135	4,523
Port Washington Harbor, Wis.....	525	677	733	968				
Presque Isle Harbor, Mich.....			1		4,681	4,029	3,818	3,850
Racine Harbor, Wis.....	383	357	225	145			13	9
Rochester, N. Y.....	243	270	170	29	1,615	1,473	891	1,218
Rockport, Mich.....	7	8			1,197	1,033		54
Saginaw River, Mich., and ports.....	2,903	3,433	2,993	4,019	48	37		
St. Joseph Harbor, Mich.....	327	348	337	314				
Sandusky Harbor, Ohio.....	7	2	2	1	11,692	11,820	6,165	6,822
Sault Ste. Marie, Mich.....	445	466	487	502		9	2	2
Sheboygan Harbor, Wis.....	526	658	432	641				
Toledo Harbor, Ohio.....	4,407	4,608	4,203	4,640	25,001	25,844	21,115	20,307
Tonawanda, N. Y.....	439	403	267	402		3	4	31
All other.....	2,125	2,880	2,007	2,883	546	1,082	970	1,279

¹ Includes Chicago Harbor and River, Calumet Harbor and River, Lake Calumet, Calumet-Sag Channel, and Chicago Sanitary and Ship Canal to Sag Junction.

² Drummond Island, Mich., included with Detour, Mich.

No. 654.—COMMERCE ON PRINCIPAL RIVERS, CANALS, AND CONNECTING CHANNELS OF THE UNITED STATES: 1945 TO 1950

[In thousands of short tons of 2,000 pounds. Excludes general ferry traffic, non-regulated car ferry traffic, and cargoes in transit]

WATERWAY	1945	1946	1947	1948	1949	1950
RIVERS						
Connecticut River below Hartford, Conn.	1,116	1,400	1,604	1,864	1,802	1,983
Hudson River, N. Y. (Mouth of Spuyten Duyvil Creek to Waterford, N. Y.)	5,747	9,181	10,349	12,716	13,503	14,574
Delaware River, Philadelphia, Pa., to Trenton, N. J.	4,261	5,093	5,832	7,218	5,901	7,086
Delaware River, Philadelphia, Pa., to the sea	29,558	37,151	41,927	42,375	39,638	69,283
Potomac River below Washington, D. C.	1,936	1,971	2,041	2,460	2,290	2,402
James River, Va.	1,469	2,214	2,506	3,101	3,255	3,610
Wilmington Harbor, N. C. ¹	1,160	2,103	2,345	2,951	3,107	4,022
Mobile River, Ala., tributaries	2,382	2,576	3,274	3,179		
Black Warrior, Warrior, and Tombigbee Rivers, Ala.	1,492	1,872	1,848	2,059	2,190	2,003
Bayou Teche, La.	532	510	614	799	996	1,241
Lake Pontchartrain, La.	390	508	447	597	616	1,390
Mermantai River, Bayou Nezpique, and Bayou Des Cannes, La.	596	813	1,189	1,505	1,549	1,763
Bayou Lafourche, La.	685	849	879	1,381	1,831	2,182
Bayou Terrebonne, La.	632	486	750	1,046	1,221	1,507
Petit Anse, Tigre, and Carlin Bayous, La.	1,019	1,104	1,382	1,518	1,784	1,916
San Joaquin River, Calif.	1,220	1,024	730	1,003	1,227	1,495
Sacramento River, Calif.	956	1,078	1,380	1,542	1,610	1,501
Columbia and Lower Willamette Rivers below Vancouver, Wash., and Portland, Oreg.	16,635	14,232	15,938	15,592	18,369	18,578
Columbia River from Vancouver, Wash., to The Dalles, Oreg.	1,417	1,826	2,005	2,684	3,034	2,845
Willamette River above Portland and Yamhill River, Oreg.	2,877	3,979	4,942	4,170	4,149	3,948
Snohomish River, Wash.	1,778	1,783	1,882	1,637	1,699	1,657
Illinois Waterway, Ill.	6,591	6,914	10,165	12,273	12,895	16,421
Mississippi River, Minneapolis, Minn., to the Passes.	43,969	41,308	51,427	57,148	59,323	66,923
Missouri River:						
Kansas City to the mouth	478	751	621	797	917	763
Kansas City to Sioux City	386	276	377	811	800	869
Sioux City to Fort Benton	7	26	14	15	4	235
Allegheny River, Pa.	2,416	2,565	2,734	3,270	3,013	3,594
Monongahela River, Pa. and W. Va.	26,556	25,429	31,742	30,015	25,246	28,510
Kanawha River, W. Va.	4,499	4,524	5,367	5,911	4,956	6,388
Ohio River, Pittsburgh to mouth ²	33,868	35,851	41,397	42,792	41,300	48,598
Cumberland River, Tenn., and Ky.	814	1,027	1,206	1,352	1,479	1,647
Tennessee River, Tenn., Ala., and Ky.	2,163	2,399	2,792	2,963	2,787	3,051
FEDERAL CANALS AND CONNECTING CHANNELS						
Cape Cod Canal, Mass.	14,684	10,656	11,925	13,113	11,619	13,025
Inland Waterway from Delaware River to Chesapeake Bay, Del. and Md.	3,690	3,698	5,388	5,597	6,362	7,298
Lake Charles Deep Water Channel, La.	10,288	6,854	8,494	10,840	11,382	12,164
Gulf Intracoastal Waterway, Plaquemine to Morgan City, alternate route.	1,693	1,533	1,878	2,158	2,191	1,819
Gulf Intracoastal Waterway, Apalachee Bay, Fla., to the Mexican border	23,045	20,457	22,801	27,866	28,291	31,520
Sabine-Neches Waterway, Tex.	26,318	43,505	47,644	55,505	51,063	48,385
Port Aransas (Aransas Pass) Corpus Christi Waterway, Tex.	13,074	19,885	22,242	22,862	19,290	21,132
Detroit River, Mich.	127,045	110,864	127,440	133,734	108,464	127,292
St. Marys Falls Canal, Mich. ³	112,983	91,587	110,732	115,414	95,832	106,140
Grays Reef Passage, Mich.	4,905	5,217	6,885	6,353	5,370	6,045
Multnomah Channel, Oreg.	2,363	1,466	1,589	1,639	1,536	997
Canals and locks at Willamette Falls, Oreg.	1,619	2,078	1,996	1,977	1,806	1,664
Lake Washington Ship Canal, Wash.	2,183	2,167	2,015	2,115	2,012	2,056
STATE AND PRIVATE CANALS						
New York State Barge Canal ⁴	2,969	2,821	3,790	4,514	3,950	4,616
Innerharbor Navigation Canal, La.	1,430	1,276	2,044	2,123	2,322	2,338

¹ Reported as "Cape Fear River at and below Wilmington, N. C." prior to 1949.

² See also table 659.

³ See also table 658.

⁴ See also table 660.

No. 655.—COMMERCIAL TRAFFIC THROUGH THE PANAMA CANAL, TOTAL, 1915 TO 1950, AND BY NATIONALITY OF VESSEL, 1950

[See general note, p. 533. Figures cover ocean-going commercial traffic which includes only tolls-paying vessels of 300 net tons and over, Panama Canal measurement, and vessels paying tolls on displacement tons of 500 displacement tons and over. Foreign naval vessels such as colliers, transports, supply ships, etc., with a measurement of 300 net tons or more and foreign naval vessels such as battleships, cruisers, destroyers, submarines, etc., with a displacement of 500 tons or more, classified as ocean-going commercial vessels]

YEAR ENDING JUNE 30	Number of transits	Net tonnage (thousands) ¹	Tolls (thousands of dollars)	Tons of cargo (thousands of long tons)	NATIONALITY OF VESSELS (year ending June 30, 1950)	Number of transits	Net tonnage (thousands)	Tolls (thousands of dollars)	Tons of cargo (thousands of long tons)
Total.....	145,451	659,865	619,456	705,799	British.....	876	5,154	4,593	5,555
1915 ²	1,058	3,507	4,367	4,888	Chilean.....	54	297	207	247
1916 ³	724	2,212	2,403	3,093	Chinese.....	1	5	5	9
1917.....	1,738	5,357	5,621	7,055	Colombian.....	104	172	154	109
1918.....	1,989	6,072	6,429	7,526	Danish.....	157	718	642	572
1919.....	1,948	5,658	6,164	6,910	Ecuadorian.....	81	142	126	56
1920.....	2,393	7,898	8,508	9,372	Egyptian.....	3	15	13	5
1921.....	2,791	10,550	11,269	11,596	French.....	101	546	485	532
1922.....	2,665	10,558	11,192	10,883	Greek.....	104	516	457	795
1923.....	3,908	17,206	17,504	19,566	Guatemalan.....	2	4	4	1
1924.....	5,158	24,181	24,285	26,099	Honduran.....	372	882	749	588
1925.....	4,592	21,134	21,394	23,957	Irish.....	1	5	4	—
1926.....	5,087	22,906	22,920	26,030	Italian.....	68	389	349	331
1927.....	5,293	24,245	24,212	27,734	Mexican.....	13	64	54	75
1928.....	6,253	27,229	26,922	29,616	Netherland.....	119	508	450	386
1929.....	6,280	27,585	27,111	30,648	Nicaraguan.....	3	5	4	2
1930.....	6,027	27,716	27,060	30,618	Norwegian.....	452	2,085	1,800	1,582
1931.....	5,370	25,690	24,025	25,065	Panamanian.....	194	902	769	1,085
1932.....	4,302	21,842	20,695	19,799	Peruvian.....	29	72	66	99
1933.....	4,162	21,094	19,601	18,161	Philippine.....	21	100	89	76
1934.....	5,234	26,410	24,047	24,704	Portuguese.....	2	10	9	16
1935.....	5,180	25,720	23,307	25,310	Soviet.....	1	5	4	6
1936.....	5,382	25,923	23,479	26,500	Spanish.....	48	179	148	192
1937.....	5,387	25,430	23,102	28,108	Swedish.....	153	704	625	570
1938.....	5,524	25,950	23,170	27,386	Turkish.....	3	17	14	13
1939.....	5,003	27,170	23,661	27,867	United States.....	2,452	14,422	12,465	15,906
1940.....	5,370	24,144	21,145	27,299	Uruguayan.....	4	18	16	27
1941.....	4,727	20,643	18,158	24,951	Venezuelan.....	30	76	68	35
1942.....	2,688	11,010	9,752	13,607					
1943.....	1,822	8,234	7,357	10,606					
1944.....	1,502	6,073	5,456	7,003					
1945.....	1,939	8,381	7,244	8,604					
1946.....	3,747	17,517	14,774	14,978					
1947.....	4,260	20,233	17,597	21,671					
1948.....	4,678	22,902	19,957	24,118					
1949.....	4,703	23,473	20,541	25,305					
1950.....	5,448	28,013	24,430	28,872					

¹ Panama Canal net tonnages prior to 1939 are estimates, based on revised measurement rules, effective Mar. 1, 1938.

² Canal opened to traffic Aug. 15, 1914.

³ Canal closed to traffic approximately 7 months of fiscal year due to slides.

No. 656.—COMMERCIAL TRAFFIC THROUGH THE PANAMA CANAL—SUMMARY, YEARS ENDING JUNE 30: 1942 TO 1950

[See general note, p. 533]

ITEM	1942	1943	1944	1945	1946	1947	1948	1949	1950
Number of transits.....	2,688	1,822	1,562	1,930	3,747	4,260	4,678	4,793	5,448
Measurement tonnage registered:									
Gross (thousands).....	14,759	10,874	8,048	11,427	23,926	27,539	31,035	31,726	37,291
Net (thousands).....	8,742	6,578	4,862	6,923	14,338	16,456	18,563	18,844	22,267
Panama Canal, net (thousands).....	11,010	8,234	6,073	8,381	17,517	20,233	22,902	23,473	28,013
Tons of cargo, total (thousands of long tons).....	13,607	10,600	7,003	8,604	14,978	21,671	24,118	25,305	28,872
Atlantic to Pacific.....	4,685	4,945	3,354	4,235	6,118	8,295	8,679	9,899	9,484
Pacific to Atlantic.....	8,923	5,655	3,649	4,369	8,860	13,376	15,430	15,406	18,388

No. 657.—PANAMA CANAL—REVENUES, EXPENSES, AND COMPUTED SURPLUS:
1914 TO 1950

[In thousands of dollars]

YEAR ENDING JUNE 30	Tolls ¹	Civil revenues	Business profits	Total revenues	Net appropriation expenses ²	Net revenues ³	Capital interest, 3 percent ⁴	Computed surplus ⁵
Total.	619,932	7,659	28,493	656,084	379,258	276,827	456,739	179,912
1914 to 1931, total	271,864	4,178	8,748	284,790	138,903	145,886	165,558	19,672
1932	20,707	327	557	21,591	10,239	11,352	14,944	3,592
1933	19,621	310	1,136	21,067	9,566	11,511	14,908	3,397
1934	24,065	97	1,367	25,528	7,931	17,597	15,039	2,558
1935	23,339	82	1,021	24,442	9,481	14,961	15,124	163
1936	23,507	120	920	24,547	9,675	14,872	15,160	288
1937	23,147	99	917	24,164	10,290	13,874	15,205	1,331
1938	23,215	90	825	24,130	9,576	14,555	15,230	675
1939	23,699	107	681	24,488	10,145	14,342	15,260	908
1940	21,177	118	1,034	22,330	10,042	12,288	15,243	2,956
1941	18,190	276	1,009	19,475	9,614	9,861	15,275	5,414
1942	9,772	⁵ 219	734	10,726	9,407	1,319	15,302	13,983
1943	7,369	⁶ 55	1,493	8,916	11,269	2,352	15,432	17,785
1944	5,474	239	1,553	7,267	12,634	5,368	15,484	20,851
1945	7,223	239	1,469	8,931	13,905	4,975	15,476	20,450
1946	14,702	268	⁷ 208	⁷ 15,267	15,214	⁷ 53	15,427	⁷ 15,374
1947	17,642	110	1,726	19,478	18,074	1,404	15,478	14,078
1948	20,004	294	⁸ 1,582	21,881	⁹ 19,527	2,354	15,490	19,138
1949	20,612	133	¹⁰ 845	21,590	21,217	373	15,089	16,318
1950	24,512	299	667	25,478	22,558	2,020	16,024	13,105

¹ Adjusted for overcharges and undercollections.² After deduction of canal earnings repaid to appropriations.³ Italics denote deficit.⁴ No interest charge against the Canal is actually made by the Treasury. In order to present the net results of operation of the Canal, interest on capital invested is computed at a rate considered reasonable for Government borrowings over an indefinite period. Computed interest prior to July 12, 1920, is included in capital investment account.⁵ Includes adjustment of \$15,000 in postal surplus.⁶ Includes adjustment of \$44,000 in postal surplus.⁷ Actual business profits of \$877,000 adjusted by \$669,000 for write-off of reimbursable capital expenditures, public works, Republic of Panama.⁸ Includes \$23,000 for prior fiscal years.⁹ Includes \$292,000 for judgments rendered by Court of Claims for overtime compensation in prior years.¹⁰ Adjusted by a net reduction of \$162,000 for prior fiscal years.Source: The Panama Canal, *Annual Report of the Governor*.

No. 658.—FREIGHT AND PASSENGER TRAFFIC ON ST. MARYS FALLS CANAL
(SAULT STE. MARIE): 1890 TO 1950

[Includes both American and Canadian canals and traffic to and from Canadian as well as American ports. Average distances, ton-miles, freight charges, etc., based on total haul from port of origin to port of destination in process of performance by vessels passing through canals.]

SEASON	FREIGHT CARRIED (1,000 SHORT TONS OF 2,000 POUNDS)					Total ton-miles (millions)	FREIGHT CHARGES	
	Total	East-bound	West-bound	By Ameri-can vessels	By Cana-dian and other foreign vessels		Amount (1,000 dollars)	Average per ton (mills)
1890	9,041	6,429	2,612	8,679	362	7,207	9,472	1.30
1895	15,063	12,030	3,033	14,497	506	12,503	14,239	1.14
1900	25,643	20,532	5,111	24,896	747	21,179	24,953	1.18
1905	44,271	36,779	7,492	42,061	2,210	36,893	31,421	.85
1910	62,363	47,134	15,229	58,580	3,794	52,406	38,711	.74
1915	71,290	56,369	14,921	66,877	4,413	59,317	41,984	.71
1920	79,282	63,404	15,818	74,866	4,416	64,702	85,742	1.33
1925	81,875	67,305	14,570	75,764	6,111	65,577	71,093	1.08
1930	72,898	57,067	15,831	67,560	5,338	59,058	61,159	1.04
1935	48,293	37,192	11,101	41,532	6,761	39,141	41,783	1.07
1938	40,043	29,053	10,990	37,775	2,268	32,922	36,314	1.10
1939	69,850	58,483	11,367	60,045	9,805	55,539	66,054	1.17
1940	89,360	76,635	12,752	79,116	10,244	71,807	74,118	1.03
1941	110,708	95,774	14,994	97,387	13,381	88,946	102,792	1.15
1942	120,119	104,139	15,980	105,255	14,864	95,903	111,470	1.16
1943	115,578	97,380	18,198	102,404	13,174	92,069	110,377	1.20
1944	116,985	98,480	18,505	103,579	13,406	93,424	122,786	1.31
1945	112,983	96,729	16,254	98,858	14,125	90,390	(1)	(1)
1946	91,587	72,614	18,973	89,648	1,939	(1)	(1)	(1)
1947	110,732	91,784	18,948	96,971	13,761	(1)	(1)	(1)
1948	115,414	95,346	20,068	100,536	14,878	(1)	(1)	(1)
1949	95,832	83,670	12,162	82,020	13,812	(1)	(1)	(1)
1950	106,140	89,191	16,949	91,038	15,102	(1)	(1)	(1)

COMMODITY	1920	1925	1930	1935	1940	1945	1949	1950
Passengers carried number	68,451	56,956	45,303	32,937	53,129	46,044	113,009	63,306
Freight, east-bound 1,000 tons 2	63,464	67,305	57,067	37,192	76,635	96,729	88,670	89,191
Flour do	748	929	853	684	480	108	73	63
Wheat do	4,304	8,785	7,318	5,388	6,660	14,436	7,971	5,714
Other grain do	1,236	3,163	1,204	876	1,087	3,031	3,022	2,462
Lumber do	358	367	303	72	47	2		
Pulpwood do				239	692	619	492	444
Iron ore do	56,643	53,821	46,990	20,277	65,842	77,710	71,527	79,962
All other do	175	240	399	656	1,827	814	585	546
Freight, west-bound 1,000 tons 2	15,818	14,570	15,831	11,101	12,725	16,284	12,182	16,949
Coal do	14,156	12,874	14,059	9,162	10,174	13,837	8,906	13,464
All other do	1,602	1,696	1,772	1,939	2,551	2,417	3,256	3,485

¹ Not available.

² Short tons of 2,000 pounds.

No. 659.—FREIGHT AND PASSENGER TRAFFIC ON OHIO RIVER: 1940 TO 1950

YEAR	Short tons	Ton-miles	Passenger carried ¹	YEAR	Short tons
	Thousands	Thousands	Number		Thousands
1940	29,549	8,322,508	1,957,308	1949—Total	41,300
1941	36,557	5,197,440	1,554,319	Up ⁴	9,150
1942	38,281	5,299,847	1,034,190	Down ⁴	9,887
1943	36,610	5,996,347	1,191,350	Inbound	17,091
1944	37,801	7,004,056	1,148,294	Outbound	5,172
1945	33,868	6,034,699	1,145,626		
1946	35,851	4,999,560	1,053,511	1950—Total ¹	48,508
1947	41,397	5,746,076	1,534,856	Up ⁴	11,279
1948	42,792	6,685,854	2,61,130	Down ⁴	11,154
1949	41,300	6,904,147	78,267	Inbound	19,946
1950 ²	48,598	8,800,451	95,631	Outbound	6,219

¹ No data included for ferry traffic.

² Largest excursion boat destroyed by fire in September 1947.

³ Preliminary.

⁴ Includes through traffic.

Source of tables 658 and 659: Department of the Army, Corps of Engineers; Annual Report of Chief of Engineers, Part II, and records.

No. 660.—FREIGHT TRAFFIC ON NEW YORK STATE CANALS—TONNAGE MOVED:
1837 TO 1951

[In short tons of 2,000 pounds. Excludes tonnage handled over State terminals but not moved through any portion of canal channel. East-bound tonnage is that moving toward Albany; west-bound is that moving away from Albany. See also *Historical Statistics*, series K 170.]

YEARLY AVERAGE	TONS	YEARLY AVERAGE	TONS	YEARLY AVERAGE OR YEAR	TONS
1837-1840	1,339,016	1886-1890	5,281,441	1936-1940	4,838,271
1841-1845	1,613,317	1891-1895	4,112,061	1941-1945	3,266,368
1846-1850	2,781,410	1896-1900	3,544,951	1946-1950	3,037,952
1851-1855	3,976,501	1901-1905	3,335,210	1945	2,908,682
1856-1860	3,911,407	1906-1910	3,288,129	1946	2,820,541
1861-1865	5,049,841	1911-1915	2,448,837	1947	3,700,050
1866-1870	5,987,724	1916-1920	1,348,365	1948	4,513,817
1871-1875	5,974,097	1921-1925	1,905,291	1949	3,949,739
1876-1880	5,219,888	1926-1930	2,904,575	1950	4,615,613
1881-1885	5,210,389	1931-1935	4,014,269	1951	5,211,472

COMMODITY	1935	1940	1945	1949	1950	1951
Freight, east-bound, tons	1,488,315	1,924,834	1,812,554	1,138,047	709,951	1,159,842
Petroleum and its products	33,170	313,654	764,717	210,036	179,491	158,914
Grain	614,855	656,472	604,105	644,983	228,051	683,376
Pulpwood	8,450	33,450	104,705	12,180	79,520	118,953
Other	881,840	921,255	339,027	270,848	222,889	198,599
Freight, west-bound, tons	3,000,887	2,843,326	1,156,128	2,811,692	3,905,662	4,051,630
Petroleum and its products	1,772,627	1,788,346	818,945	2,487,136	3,472,462	3,778,596
Other	1,228,280	1,084,980	337,183	324,556	433,200	273,034

Source: State of New York, Department of Public Works; annual statements on canal tonnages.

No. 661.—VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED
TONNAGE: 1840 TO 1951

[In thousands of net tons. Excludes domestic trade. For definition of net registered tonnage and vessel entrances and clearances, see general note, p. 533. Figures cover years ending June 30 to and including 1918, calendar years thereafter. Seaports include all ports except northern border ports; see table 662. See also *Historical Statistics*, series K 146-157.]

YEARLY AVERAGE OR YEAR	ENTERED		CLEARED		YEARLY AVERAGE OR YEAR	ENTERED		CLEARED	
	Sea-ports	Other ports	Sea-ports	Other ports		Sea-ports	Other ports	Sea-ports	Other ports
1840	1,788	501	1,861	492	1931-1935	54,928	10,462	55,214	10,351
1850	3,169	1,179	3,167	1,194	1936-1940	55,521	11,595	56,967	11,575
1860	5,000	3,275	5,257	3,533	1941-1945	52,620	15,374	56,304	15,489
1870	6,270	2,886	6,362	2,807	1946-1950	75,094	12,309	74,889	12,301
1871-1875	8,462	2,997	8,514	2,994	1940	45,393	13,151	48,096	13,176
1876-1880	12,134	2,792	12,197	2,807	1941	42,616	16,445	40,142	16,454
1881-1885	13,604	2,931	13,781	2,917	1942	28,258	15,684	31,076	15,730
1886-1890	13,479	2,602	13,655	2,593	1943	44,739	16,346	50,232	16,484
1891-1895	16,801	2,816	16,965	2,876	1944	66,305	15,555	71,717	15,668
1896-1900	20,931	3,989	21,077	4,007	1945	81,182	12,839	81,452	13,107
1901-1905	24,551	5,939	24,633	5,918	1946	69,520	10,738	66,376	10,849
1906-1910	29,651	8,072	29,156	8,036	1947	80,889	12,907	84,508	12,652
1911-1915	36,035	11,879	35,954	12,061	1948	76,910	14,023	75,714	13,735
1915-1920 ²	38,071	13,440	40,137	13,511	1949	74,701	10,999	73,063	11,223
1921-1925	52,059	13,384	53,578	13,075	1950	73,451	13,178	74,785	13,044
1926-1930	63,768	15,293	64,441	15,319	1951	93,674	14,412	(1)	(1)

¹ Year ending Sept. 30. ² Average for period July 1, 1915, to Dec. 31, 1920.

³ Preliminary data, subject to revision.

⁴ Data not available.

Source: Department of Commerce, Bureau of the Census; annual report, *Foreign Commerce and Navigation of the United States*, and records.

No. 662.—VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED
TONNAGE BY REGIONS, 1911 TO 1951, AND BY CUSTOMS DISTRICTS, 1948 TO 1951

[In thousands of net tons. See headnote, table 661.]

CUSTOMS DISTRICT	1948 ¹		1949 ¹		1950 ¹		1951 ¹	
	Entered	Cleared	Entered	Cleared	Entered	Cleared	Entered	Cleared
Grand total	90,927	89,449	85,700	84,286	86,629	87,829	108,086	(2)
Seaports, total	76,910	75,714	74,701	73,063	73,451	74,785	93,674	(2)
North Atlantic coast, total	33,454	32,425	34,669	33,711	38,683	38,067	41,935	(2)
Maine, New Hampshire	1,786	1,547	1,851	1,518	2,195	1,987	3,124	(2)
Massachusetts	3,043	1,695	3,391	2,195	4,170	2,814	3,840	(2)
Rhode Island	389	458	301	420	307	425	343	(2)
Connecticut	147	213	153	374	405	408	434	(2)
New York	21,795	24,184	21,454	23,657	22,489	25,301	24,472	(2)
Philadelphia	6,296	4,320	7,519	5,547	9,117	7,132	9,722	(2)
South Atlantic coast, total	16,059	16,072	12,977	13,195	9,278	9,863	20,031	(2)
Maryland	6,147	5,197	5,879	4,738	4,667	4,188	6,877	(2)
Virginia	6,691	7,969	4,495	5,859	1,352	2,420	9,693	(2)
North Carolina	106	119	96	84	157	85	129	(2)
South Carolina	1,170	734	703	497	765	551	1,046	(2)
Georgia	755	544	567	516	610	728	687	(2)
Puerto Rico	717	1,104	894	1,120	1,367	1,490	1,244	(2)
Virgin Islands ²	473	397	343	381	360	401	354	(2)
Gulf coast, total	16,501	16,516	15,719	14,860	13,385	14,206	15,733	(2)
Florida	2,228	2,229	2,224	2,328	2,851	2,941	3,208	(2)
Mobile	2,611	1,505	2,243	1,019	2,049	924	1,949	(2)
New Orleans	5,367	5,926	4,709	5,560	4,486	5,411	4,938	(2)
Sabine	1,505	1,736	1,890	1,301	770	962	951	(2)
Galveston	4,793	5,115	4,653	4,652	3,229	3,998	4,686	(2)
Mexican border, Laredo	388	312	343	340	368	420	430	(2)
Pacific coast, total	10,493	10,380	10,993	10,957	11,737	12,229	15,545	(2)
Washington	2,578	2,348	2,739	2,453	194	103	2,275	(2)
Oregon	935	785	1,499	1,287	3,993	3,820	1,994	(2)
San Francisco	2,487	2,905	1,921	2,814	2,242	3,205	3,627	(2)
Los Angeles	3,122	2,976	3,360	3,101	1,153	975	5,269	(2)
Alaska	375	332	343	400	3,064	2,966	304	(2)
Hawaii	817	999	928	915	315	348	911	(2)
San Diego	181	28	203	37	776	812	165	(2)
Northern border, total	14,023	13,735	10,999	11,223	13,178	13,044	14,412	(2)
St. Lawrence	150	33	80	48	159	60	156	(2)
Rochester	1,648	1,580	951	933	1,643	1,557	1,828	(2)
Buffalo	640	265	688	444	872	453	1,134	(2)
Ohio	5,849	7,620	4,307	6,005	2,052	1,108	5,487	(2)
Michigan	1,987	1,817	1,943	1,677	270	218	1,858	(2)
Chicago	313	954	507	827	1,853	1,569	524	(2)
Wisconsin	262	237	266	192	454	585	304	(2)
Duluth and Superior	3,178	1,211	2,197	1,097	5,875	7,494	3,119	(2)

YEARLY AVERAGE OR YEAR	ATLANTIC COAST		GULF COAST		PACIFIC COAST		Mexi- can border, total	NORTHERN BORDER	
	Total	With cargo	Total	With cargo	Total	With cargo		Total	With cargo
Entrances:									
1911-1915	24,203	20,708	6,635	3,377	5,055	3,649	52	11,879	4,564
1915-1920	24,581	16,094	7,939	4,646	5,487	4,320	64	13,440	5,646
1921-1925	30,979	27,133	12,390	8,243	9,562	6,070	28	13,334	6,475
1926-1930	36,884	33,003	11,634	7,415	15,100	8,247	150	15,293	7,700
1931-1935	31,721	28,668	8,058	4,858	14,968	9,230	180	10,402	4,997
1936-1940	30,634	26,925	10,115	5,593	14,108	9,368	663	11,595	5,187
1941-1945	34,014	18,397	6,454	4,463	11,211	6,153	40	15,374	5,060
1946	44,046	25,382	14,684	5,494	10,536	5,317	254	10,738	2,825
1947	52,904	30,857	16,089	7,269	10,881	5,420	414	12,908	2,579
1948	49,513	36,198	16,501	8,273	10,403	6,227	388	14,028	2,800
1949	47,646	39,408	15,719	9,193	10,993	7,495	343	10,999	2,957
1950 ¹	47,961	18,797	13,385	3,937	11,737	3,785	368	13,178	3,021
1951 ¹	61,966	47,997	15,733	9,730	15,545	8,848	430	14,412	3,412
Clearances:									
1911-1915	23,808	21,765	7,193	6,414	5,104	4,643	50	12,061	8,567
1915-1920	25,921	23,168	8,528	6,915	5,626	4,762	62	13,511	9,637
1921-1925	30,837	24,284	12,833	9,589	9,880	8,360	28	13,075	9,236
1926-1930	36,361	28,696	12,326	10,641	15,658	13,148	95	15,319	10,504
1931-1935	30,658	23,563	9,018	8,079	15,411	13,220	127	10,351	7,309
1936-1940	30,472	22,459	11,064	9,601	14,752	13,394	677	11,575	9,412
1941-1945	35,545	27,351	7,636	6,494	13,082	11,288	40	15,489	12,657
1946	41,282	27,048	15,080	13,066	9,779	7,629	233	10,849	9,548
1947 ¹	54,214	40,508	18,125	16,149	11,813	10,645	355	12,652	11,284
1948 ¹	48,497	32,595	16,516	14,169	10,380	9,169	312	13,735	12,339
1949 ¹	46,906	30,230	14,860	12,536	10,957	9,846	340	11,223	9,382
1950 ¹	47,930	10,488	14,206	4,702	12,229	6,250	420	13,044	11,540
1951 ¹	(3)	(3)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

¹ Preliminary data, subject to revision. ² Data not available.

³ Reported as a foreign country prior to Jan. 1, 1935.

July 1, 1915, to Dec. 31, 1920.

Source: Department of Commerce, Bureau of the Census; annual report, *Foreign Commerce and Navigation of the United States*, and records.

No. 663.—VESSELS ENTERED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY CLASSES: 1881 TO 1951

[All figures except number of vessels and percentages in thousands of net tons. See headnote, table 661. Totals represent sums of unrounded figures; may vary from sum of rounded amounts. See also *Historical Statistics*, series K 146-151.]

YEARLY AVERAGE OR YEAR	Num- ber of vessels, all ports	ALL PORTS			SEAPORTS					
		Total	Ameri- can vessels	For- eign vessels	Per- cent Ameri- can	All vessels	Sailing vessels	Steam vessels	With cargo	In ballast
1881-1890	32,088	16,308	3,395	12,913	20.8	13,542	5,251	8,291	11,560	1,982
1891-1900	31,781	22,269	4,978	17,291	22.4	18,866	3,816	15,050	14,184	4,682
1901-1905	34,040	30,480	6,802	23,688	22.3	24,551	2,606	21,945	19,205	5,346
1906-1910	34,375	37,722	8,372	29,350	22.2	29,651	1,816	27,834	23,621	6,020
1911-1915	38,951	47,914	12,205	35,709	26.5	36,035	1,574	34,461	27,778	8,257
1916-1920 ¹	42,713	51,511	21,899	29,512	42.7	38,071	1,899	36,173	26,128	12,943
1921-1925	41,546	66,203	20,645	36,648	44.7	52,959	1,004	51,955	41,471	11,488
1926-1930	45,846	79,062	30,314	48,748	38.3	63,768	472	63,296	48,710	15,058
1931-1935	31,338	65,390	23,847	41,543	36.5	54,928	227	54,701	42,835	12,093
1936-1940	33,954	67,117	19,245	47,878	28.7	55,521	102	55,419	41,951	13,570
1941-1945	38,997	67,994	34,655	33,336	51.0	52,620	37	52,583	28,995	23,626
1946-1950 ²	48,813	87,462	46,205	41,257	52.8	75,094	(3)	(3)	50,288	24,806
1939	35,310	68,992	17,769	51,223	25.8	57,973	34	57,939	41,940	16,033
1940	33,636	58,544	19,220	39,324	32.8	45,393	60	45,333	34,008	11,385
1941	37,835	59,061	20,940	38,121	35.5	42,616	40	42,576	32,810	9,797
1942	31,358	43,942	13,611	30,331	31.0	28,257	32	28,225	18,077	10,181
1943	36,640	61,084	29,292	31,792	48.0	44,739	37	44,702	23,792	20,947
1944	40,834	81,860	48,071	33,789	58.7	66,305	30	66,275	32,297	34,008
1945	48,318	94,021	61,375	32,046	65.3	81,182	44	81,138	37,982	45,190
1946	48,082	80,282	53,045	27,213	66.1	69,520	24	69,496	36,348	33,172
1947 ²	50,440	93,706	52,627	40,170	57.2	80,889	12	80,877	43,872	37,016
1948 ²	50,238	90,927	47,726	43,199	52.5	76,910	(3)	(3)	51,044	25,866
1949 ²	48,368	85,700	41,251	44,432	48.1	74,701	(3)	(3)	56,403	18,299
1950 ²	46,926	86,629	35,376	51,251	40.8	73,451	(3)	(3)	63,771	9,678
1951 ²	48,466	108,086	44,571	63,515	41.2	93,074	(3)	(3)	66,868	26,806
YEARLY AVERAGE OR YEAR		SEAPORTS—continued					NORTHERN BORDER PORTS			
	American vessels		Foreign vessels		Percent Ameri- can	Total	American vessels	For- eign vessels	With cargo	
	Total	With cargo	Total	With cargo						
1881-1890	2,983	2,559	10,609	9,001	21.7	2,766	462	2,304	1,976	
1891-1900	3,619	2,956	15,247	11,228	19.2	3,403	1,359	2,044	1,589	
1901-1905	3,962	3,246	20,589	15,960	16.1	5,939	2,840	3,099	2,602	
1906-1910	4,175	3,471	25,475	20,150	14.1	8,072	4,197	3,875	3,207	
1911-1915	5,276	4,200	30,750	23,578	14.6	11,879	6,920	4,950	4,564	
1916-1920 ¹	14,508	11,375	23,563	13,753	38.1	13,490	5,950	5,950	5,950	
1921-1925	22,526	18,404	31,433	23,068	42.5	13,334	7,119	6,215	6,475	
1926-1930	23,182	18,809	40,586	29,901	36.4	15,293	7,132	8,162	7,700	
1931-1935	19,854	16,870	35,074	25,965	36.1	10,462	3,993	6,469	4,997	
1936-1940	16,090	13,865	39,432	28,086	29.0	11,595	3,154	8,441	5,187	
1941-1945	30,059	16,877	22,560	12,118	57.1	15,374	4,599	10,775	5,060	
1946-1950 ²	42,168	26,318	32,926	23,970	56.2	12,369	4,037	8,332	2,756	
1939	14,553	12,258	43,421	29,681	25.1	11,019	3,217	7,802	5,311	
1940	15,740	13,965	29,652	20,043	34.7	13,151	3,480	9,671	4,953	
1941	16,767	15,658	25,849	17,161	39.3	16,445	4,174	12,271	5,533	
1942	10,326	8,004	17,931	10,073	36.5	15,684	3,285	12,400	5,105	
1943	24,508	14,135	20,281	9,657	54.8	16,345	4,784	11,561	5,834	
1944	42,198	20,509	24,109	11,788	63.6	15,555	5,875	9,680	5,049	
1945	56,498	26,080	24,682	11,912	69.6	12,839	4,876	7,963	3,781	
1946	49,143	23,437	20,378	12,911	70.7	10,738	3,902	6,835	2,324	
1947 ²	49,044	26,029	31,844	17,843	60.6	12,908	4,582	8,326	2,579	
1948 ²	43,270	28,107	33,640	22,937	56.3	14,023	4,457	9,568	2,900	
1949 ²	37,626	27,479	37,076	28,924	50.4	10,999	3,625	7,375	2,957	
1950 ²	31,757	26,536	41,693	37,235	43.2	13,178	3,619	9,558	3,021	
1951 ²	40,482	28,005	53,192	38,803	43.2	14,412	4,089	10,323	3,412	

¹ Average for period July 1, 1915, to Dec. 31, 1920.

² Preliminary data, subject to revision.

³ Not available.

TONNAGE ENTERED AND CLEARED

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No. 664.—VESSELS CLEARED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY CLASSES: 1881 TO 1950

[All figures except number of vessels and percentages in thousands of net tons. See headnote, table 661. Totals represent sums of unrounded figures; may vary from sum of rounded amounts. See also *Historical Statistics*, series K 152-157.]

YEARLY AVERAGE OR YEAR	Number of vessels, all ports	ALL PORTS			SEAPORTS					
		Total	American vessels	Foreign vessels	Percent American	All vessels	Sailing vessels	Steam vessels	With cargo	
1881-1890	32,159	16,473	3,450	13,023	20.9	13,719	5,363	8,356	12,705	924
1891-1900	31,902	22,463	5,038	17,425	22.4	19,021	3,818	15,203	17,514	1,507
1901-1905	33,863	30,551	6,812	23,739	22.3	24,633	2,621	22,012	22,460	2,173
1906-1910	33,897	37,192	8,282	28,910	22.3	29,156	1,850	27,306	26,768	2,388
1911-1915	38,790	48,015	12,512	35,503	26.1	35,954	1,654	34,301	32,827	3,128
1916-1920 ¹	42,687	53,647	23,005	30,643	42.9	40,137	2,057	38,080	34,851	5,285
1921-1925	40,120	66,653	29,554	37,099	44.3	53,578	934	52,594	42,233	11,345
1926-1930	44,082	79,760	30,709	49,051	38.5	64,441	467	63,973	52,581	11,860
1931-1935	30,520	65,565	23,616	41,949	36.0	55,214	221	54,903	44,990	10,224
1936-1940	32,706	68,541	19,448	49,093	28.4	56,967	102	56,864	46,126	10,841
1941-1945	38,195	71,792	37,283	34,509	51.9	56,304	41	56,262	45,147	11,157
1946-1950 ²	45,135	87,190	44,942	42,244	51.5	74,889	(3)	54,584	20,302	
1939	34,192	70,306	18,156	52,150	25.8	50,218	33	59,185	48,170	11,048
1940	33,417	62,171	20,248	41,923	32.6	48,996	52	48,943	38,154	10,842
1941	38,024	62,596	21,800	40,726	34.9	40,142	44	46,098	32,714	13,428
1942	30,506	47,705	16,354	31,332	34.3	31,975	32	31,943	26,464	5,511
1943	35,915	66,716	33,682	33,034	50.5	50,232	37	50,195	42,470	7,762
1944	40,321	87,385	53,050	34,335	60.7	71,717	52	71,665	60,095	11,622
1945	46,210	94,559	61,460	33,099	65.0	81,452	42	81,410	63,992	17,461
1946	44,464	77,225	49,124	28,101	63.6	66,376	33	66,343	47,828	18,547
1947 ²	48,374	97,160	54,088	43,072	55.7	84,508	14	84,494	67,483	17,024
1948 ²	46,067	80,449	45,775	43,667	51.2	75,714	(3)	(3)	56,154	19,552
1949 ²	43,503	84,286	39,681	44,604	47.1	73,063	(3)	(3)	52,759	20,304
1950 ²	43,268	87,829	36,043	51,778	41.0	74,785	(3)	(3)	48,695	26,084

YEARLY AVERAGE OR YEAR	SEAPORTS—continued				NORTHERN BORDER PORTS				
	American vessels		Foreign vessels		Percent American	Total	American vessels	Foreign vessels	
	Total	With cargo	Total	With cargo					
1881-1890	2,978	2,541	10,741	10,254	21.7	2,754	472	2,282	1,778
1891-1900	3,644	2,914	15,377	14,600	19.2	3,442	1,394	2,048	2,129
1901-1905	4,000	3,284	20,633	19,176	16.2	5,018	2,812	3,106	3,825
1906-1910	4,084	3,498	25,072	23,270	14.0	8,036	4,198	3,838	5,073
1911-1915	5,361	4,522	30,594	28,305	14.9	12,061	7,151	4,909	8,567
1916-1920 ¹	15,455	11,505	24,681	23,346	38.5	13,511	7,550	5,962	9,637
1921-1925	22,556	14,974	31,022	27,259	42.1	13,075	6,098	6,077	9,236
1926-1930	23,338	17,071	41,102	35,510	36.2	15,319	7,371	7,948	10,504
1931-1935	19,653	15,729	35,561	29,261	35.6	10,351	3,962	6,388	7,309
1936-1940	16,302	13,116	40,665	33,009	28.6	11,575	3,146	8,429	9,412
1941-1945	32,585	26,377	23,718	18,770	57.9	15,489	4,098	10,789	12,657
1946-1950 ²	40,933	29,510	33,953	25,073	54.7	12,301	4,010	8,281	10,819
1939	14,903	12,130	44,316	36,040	25.2	11,088	3,253	7,835	8,880
1940	16,766	12,904	32,230	25,249	34.2	13,176	3,483	9,693	11,401
1941	17,701	12,251	28,441	20,462	38.4	16,454	4,169	12,285	13,824
1942	13,149	10,827	18,826	15,637	41.1	15,730	3,205	12,525	13,782
1943	28,820	24,140	21,400	18,330	57.0	16,484	4,856	11,628	13,688
1944	46,919	39,980	24,798	20,134	65.4	15,668	6,131	9,538	12,016
1945	56,332	44,705	25,120	19,286	69.2	13,107	5,129	7,979	10,027
1946	45,113	31,963	21,263	15,865	68.0	10,849	4,012	6,837	9,548
1947 ²	49,558	38,783	34,949	28,700	58.6	12,652	4,530	8,122	11,284
1948 ²	41,348	29,840	34,358	26,314	54.6	13,735	4,428	9,309	12,339
1949 ²	36,136	25,446	36,927	27,313	49.5	11,223	3,545	7,677	9,382
1950 ²	32,510	21,520	42,269	27,175	43.5	13,044	3,533	9,509	11,540

¹ Average for period July 1, 1915, to Dec. 31, 1920.² Preliminary data, subject to revision.³ Not available.

No. 665.—VESSELS ENTERED AND CLEARED AT SEAPORTS IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY COUNTRIES OF ORIGIN AND DESTINATION: 1921 TO 1947

[In thousands of net tons. Only traffic by sea is included. For definition of net tonnage, see general note, p. 533]

COUNTRY	1921-1925, average	1926-1930, average	1931-1935, average	1936-1940, average	1941-1945, average	1945	1946	1947 (prel.)
Total by sea:								
Entered-----	52,959	63,768	54,928	55,521	52,620	81,182	69,520	80,889
Cleared-----	53,578	64,441	55,214	56,967	56,304	81,452	66,376	84,508
Belgium:								
Entered-----	1,231	1,560	1,068	940	929	4,630	2,914	4,220
Cleared-----	1,190	1,280	1,013	892	348	1,739	2,317	4,057
Denmark:								
Entered-----	372	532	451	251	28	114	809	1,234
Cleared-----	450	686	402	167	21	107	681	1,223
France:								
Entered-----	1,953	2,321	2,027	2,093	1,721	7,531	6,209	6,435
Cleared-----	2,250	2,475	2,582	2,395	1,016	5,008	6,500	8,427
Germany:								
Entered-----	2,998	3,813	3,806	2,530	48	241	2,826	3,091
Cleared-----	3,165	3,714	3,235	2,119	50	251	2,132	2,750
Italy:								
Entered-----	1,707	2,101	1,909	1,688	1,706	4,139	4,593	4,829
Cleared-----	1,986	2,023	1,869	1,727	603	2,085	5,080	6,154
Netherlands:								
Entered-----	1,654	2,081	1,389	1,804	100	493	1,758	3,161
Cleared-----	1,464	1,499	1,050	1,368	107	529	1,595	2,172
Norway:								
Entered-----	384	360	379	554	52	261	627	996
Cleared-----	412	361	269	365	54	270	705	798
Spain:								
Entered-----	608	850	674	361	210	306	454	378
Cleared-----	463	612	697	260	139	157	283	281
Sweden:								
Entered-----	504	681	695	834	132	537	1,006	1,806
Cleared-----	353	498	412	604	93	297	1,049	2,046
United Kingdom:								
Entered-----	9,378	10,614	6,087	6,422	13,274	15,611	8,026	8,700
Cleared-----	8,647	10,577	6,147	5,871	11,912	11,715	5,397	6,862
Canada:								
Atlantic coast: ¹								
Entered-----	1,201	1,607	2,265	2,033	1,110	801	1,351	1,803
Cleared-----	1,331	1,709	2,267	2,408	4,775	5,602	1,325	1,721
British Columbia, Yukon—								
Entered-----	4,571	6,619	6,682	6,551	2,670	2,026	2,039	2,818
Cleared-----	4,573	6,556	6,878	7,272	3,002	2,228	2,529	3,347
Central America: ²								
Entered-----	1,734	2,391	2,308	3,307	2,101	3,990	3,516	3,279
Cleared-----	1,640	2,692	2,801	4,211	2,535	3,721	2,837	3,377
Mexico:								
Entered-----	8,160	2,840	1,548	1,932	705	704	1,199	1,756
Cleared-----	8,391	2,892	1,755	2,028	780	744	1,173	1,725
British West Indies, Bermuda, and British Honduras:								
Entered-----	1,351	1,975	3,210	2,684	897	651	649	737
Cleared-----	1,435	2,216	3,400	3,172	1,334	1,140	1,119	1,315
Cuba:								
Entered-----	4,769	5,875	5,435	4,988	3,133	2,630	2,506	4,134
Cleared-----	4,659	5,832	5,292	4,832	3,012	2,517	2,895	4,413
Dominican Republic:								
Entered-----	380	713	688	499	283	154	212	380
Cleared-----	449	920	903	589	342	272	308	502
Haiti:								
Entered-----	105	220	176	251	128	108	189	198
Cleared-----	230	204	188	262	135	102	204	261
Argentina:								
Entered-----	1,006	966	499	828	534	434	657	915
Cleared-----	707	997	358	494	244	205	685	1,199
Brazil:								
Entered-----	552	918	803	637	707	792	721	873
Cleared-----	913	1,252	924	1,241	882	850	1,565	1,746
Chile:								
Entered-----	975	1,387	545	1,039	747	841	898	1,108
Cleared-----	793	1,058	507	734	511	610	604	623
Colombia:								
Entered-----	144	958	1,056	599	633	935	871	1,106
Cleared-----	226	966	1,015	1,030	592	571	1,167	1,645
British India, British Malaya, and Ceylon:								
Entered-----	57	833	704	691	877	997	1,231	1,245
Cleared-----	330	428	289	279	1,245	1,829	569	799

¹ Beginning 1939 includes maritime provinces only.² Not including British Honduras.

No. 665.—VESSELS ENTERED AND CLEARED AT SEAPORTS IN FOREIGN TRADE—
NET REGISTERED TONNAGE, BY COUNTRIES, ETC.—Continued

COUNTRY	1921– 1925, average	1926– 1930, average	1931– 1935, average	1936– 1940, average	1941– 1945, average	1945	1946	1947 (prel.)
China, Hong Kong, and Kwantung:								
Entered.....	959	1,044	827	805	96	106	1,224	1,232
Cleared.....	963	894	562	359	96	194	1,556	1,077
Japan:								
Entered.....	1,607	2,320	2,169	2,853	733	2,294	2,691	2,687
Cleared.....	2,106	3,284	3,815	4,631	623	1,308	2,122	3,046
Philippine Islands:								
Entered.....	408	611	1,012	986	1,110	4,534	1,970	1,403
Cleared.....	359	503	406	663	454	1,472	1,168	1,514
Oceania:								
Entered.....	509	931	778	693	4,651	8,242	1,318	815
Cleared.....	946	1,396	831	714	2,677	5,071	1,022	1,001
All other countries:								
Entered.....	3,165	6,649	5,677	6,717	18,220	16,990	17,076	19,460
Cleared.....	3,149	6,913	5,388	6,299	18,631	30,849	17,699	20,427

No. 666.—VESSELS ENTERED AND CLEARED AT SEAPORTS IN FOREIGN TRADE—
NET REGISTERED TONNAGE, BY NATIONALITY OF VESSEL: 1921 TO 1947

[In thousands of net tons. Includes only traffic by sea and to and from foreign countries. The large trade with Canada on the Great Lakes and the St. Lawrence is handled primarily by vessels of the United States and of the British (Canadian) flag. British (Canadian) flag vessels predominate in this trade. See tables 663 and 664 in which the columns for northern border represent trade with Quebec and Ontario]

NATIONALITY	1921– 1925, average	1926– 1930, average	1931– 1935, average	1936– 1940, average	1941– 1945, average	1945	1946	1947 (prel.)
Total by sea:								
Entered.....	52,959	63,768	54,928	55,521	52,620	81,182	69,520	80,889
Cleared.....	53,578	64,441	55,214	56,967	56,304	81,452	66,376	84,508
American:								
Entered.....	22,526	23,182	19,855	16,090	30,059	56,499	49,143	49,045
Cleared.....	22,556	23,338	19,653	16,302	32,585	56,332	45,113	49,558
Total foreign:								
Entered.....	30,433	40,586	35,074	39,432	22,561	24,682	20,378	31,844
Cleared.....	31,022	41,102	35,561	40,665	23,718	25,120	21,263	34,949
Belgian:								
Entered.....	332	374	274	332	143	173	280	254
Cleared.....	343	370	269	329	158	180	263	287
British:								
Entered.....	16,807	20,189	15,270	14,506	10,012	11,016	7,585	10,880
Cleared.....	17,064	20,291	15,373	14,889	10,749	11,149	7,346	10,887
Danish:								
Entered.....	920	1,136	917	1,040	40	199	544	874
Cleared.....	928	1,168	902	1,054	41	190	575	982
Dutch:								
Entered.....	1,300	1,798	1,634	2,322	1,212	1,326	880	1,456
Cleared.....	1,292	1,809	1,627	2,352	1,235	1,298	1,057	1,696
French:								
Entered.....	1,492	1,870	1,652	1,852	222	438	631	907
Cleared.....	1,518	1,905	1,694	1,850	227	502	699	1,218
German:							3	
Entered.....	847	2,654	3,260	2,488	-----	-----	-----	-----
Cleared.....	870	2,736	3,280	2,414	-----	-----	-----	-----
Italian:								
Entered.....	1,490	2,175	1,798	1,690	30	29	198	1,509
Cleared.....	1,569	2,150	1,800	1,704	33	62	210	2,000
Japanese:								
Entered.....	2,059	2,618	2,473	3,014	257	-----	-----	-----
Cleared.....	2,235	2,741	2,682	3,428	400	-----	-----	-----
Norwegian:								
Entered.....	2,817	4,026	4,072	6,672	3,932	4,562	3,489	3,970
Cleared.....	2,784	4,136	4,178	6,839	3,989	4,680	3,530	4,227
Spanish:								
Entered.....	480	571	450	185	198	251	383	403
Cleared.....	487	586	457	188	197	235	406	426
Swedish:								
Entered.....	564	985	1,013	1,206	542	818	1,192	1,340
Cleared.....	566	1,005	1,017	1,233	541	766	1,245	1,348
All other foreign:								
Entered.....	1,317	2,190	2,252	4,125	5,872	5,870	5,193	10,251
Cleared.....	1,366	2,206	2,281	4,377	6,148	6,058	5,932	11,389

Source of tables 665 and 666: Department of Commerce, Bureau of the Census; annual report, *Foreign Commerce and Navigation of the United States*, and records.

WATERWAYS, WATER TRAFFIC, AND SHIPPING

No. 667.—UNITED STATES FLAG STREAM AND MOTOR MERCHANT VESSELS: 1941 TO 1951

[Dead weight tonnage in thousands. Covers seagoing vessels of 1,000 gross tons and over engaged in foreign and domestic trade, and inactive vessels. Excludes special types and vessels employed on Great Lakes.]

DATE AND TYPE OF VESSEL	ALL VESSELS		ACTIVE VESSELS						INACTIVE VESSELS			SPECIAL SERVICE				
	Number	Dead weight tons	Total		Foreign trade		Domestic trade		Coastwise		Intercoastal		Noncontiguous Number	Dead weight tons	Number	Dead weight tons
			Number	Dead weight tons	Number	Dead weight tons	Total	Number	Dead weight tons	Number	Dead weight tons	Number				
1941, June 30	1,168	10,096	1,134	9,888	471	4,052	663	5,836	488	4,261	94	947	81	628	31	177
Combination	94	541	87	513	43	348	44	336	34	118	...	...	6	15	3	31
Cargo	716	5,472	691	5,306	358	2,966	333	2,340	179	890	64	512	23	148	1	13
Tankers	358	4,683	336	4,070	70	1,739	286	3,331	275	3,205	4	56	7	69	2	18
1946, Sept. 30	4,422	46,540	2,332	25,400	1,890	20,593	442	4,807	297	3,483	54	563	91	761	2	21,140
Combination	86	555	1,25	1,166	15	1,128	10	38	...	...	...	...	10	638	1	389
Cargo	3,492	33,380	1,833	18,111	1,607	16,201	226	1,910	101	1,730	1	561	72	1,609	1	266
Tankers	12,605	474	7,123	208	4,204	206	2,859	196	2,753	1	2	9	104	420	1	482
1947, Dec. 31	3,696	38,882	2,114	23,651	1,603	17,288	511	6,413	381	5,104	68	742	62	567	1	1,582
Combination	96	742	38	284	259	6	25	...	...	...	...	...	...	...	...	15,231
Cargo	2,977	29,206	1,628	16,361	1,434	14,779	194	1,782	82	1,659	65	692	47	431	1	458
Tankers	624	8,934	448	6,806	137	2,200	311	4,606	239	4,445	3	50	9	111	1	645
1948, June 30	3,490	36,774	1,723	19,552	1,246	18,767	477	5,785	327	4,329	66	721	84	735	1	1,767
Combination	77	601	48	385	41	357	7	28	...	...	...	...	7	28	1	222
Cargo	2,887	28,674	1,221	1,924	1,023	5,932	198	1,832	68	1,669	62	667	68	596	1	666
Tankers	526	7,499	454	6,743	182	2,181	272	3,925	259	3,760	62	677	9	111	1	250
1949, June 30	3,379	36,228	1,886	16,044	1,004	11,416	382	4,628	282	3,437	62	700	58	491	1	1,993
Combination	75	609	47	388	43	375	4	13	...	...	...	...	4	13	1	184
Cargo	2,790	28,442	969	10,063	813	8,026	156	1,437	53	416	59	657	44	364	1	32
Tankers	501	7,177	370	5,593	148	2,415	222	3,178	209	3,021	3	43	10	114	1	584
1950, June 30	3,408	36,526	1,145	13,828	711	8,353	434	5,474	279	3,716	87	1,131	68	626	2	2,263
Combination	88	639	51	417	45	389	6	28	...	...	...	...	6	28	1	698
Cargo	2,846	28,927	682	7,075	505	5,367	177	1,708	66	1,550	58	649	53	500	2	1,164
Tankers	479	6,959	412	6,335	161	2,587	251	3,737	213	3,157	29	682	9	98	1	624
1951, June 30	3,386	36,336	1,414	16,761	988	11,425	426	5,333	287	3,924	58	667	81	741	1	1,732
Combination	1	266	2,067	51	428	46	404	5	24	...	...	...	5	24	1	1,053
Cargo	2,650	27,376	919	9,614	743	7,892	176	1,721	55	1,584	55	625	66	611	1	1,361
Tankers	470	6,893	444	6,718	199	3,129	245	3,387	232	3,440	3	41	10	105	2	401

1 Comprised of 67 combination ships of 467,000 deadweight tons, 26 transports, hospital ships, etc., of 175,000 deadweight tons carried in this classification in previous years, and 183 cargo ships of 1,426,000 deadweight tons originally constructed as cargo ships but converted to transports, hospital ships, etc., and included in the cargo classification of previous years.

Source: Department of Commerce, Maritime Administration; records.

MERCHANT VESSELS

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No. 668.—MERCHANT VESSELS COMPLETED BY U. S. SHIPYARDS: 1914 TO 1951

[Represents self-propelled steel vessels of 2,000 gross tons and over. For explanation of gross-tons and dead-weight tons, see text p. 533.]

YEAR	Number	Gross tons	PASSENGER-CARGO/TRANSPORT			CARGO			TANKER		
			Number	Gross tons	Dead-weight tons	Number	Gross tons	Dead-weight tons	Number	Gross tons	Dead-weight tons
1914	26	135,164	1	2,662	800	17	87,585	130,278	8	44,917	67,222
1915	24	128,337	3	19,987	12,600	17	88,262	131,388	4	20,088	28,802
1916	74	369,955	1	6,063	7,480	49	200,824	299,623	24	163,068	246,053
1917	125	642,120	1	10,206	9,940	92	413,002	627,002	32	218,312	314,225
1918	414	1,769,629	5	29,736	24,297	375	1,508,003	2,282,555	34	231,890	339,368
1919	723	3,369,884	2	10,285	10,650	679	3,086,207	4,680,321	42	273,392	394,713
1920	467	2,395,545	12	99,911	111,000	375	1,758,086	2,695,753	80	537,548	778,027
1921	183	1,359,426	22	256,436	243,380	57	316,900	485,418	104	786,081	1,158,053
1922	19	168,024	3	41,293	34,384	10	78,442	155,680	6	48,289	70,663
1923	18	117,042	7	33,047	26,110	9	67,582	110,410	2	15,513	23,420
1924	12	84,302	7	43,740	19,758	4	34,016	48,450	1	6,546	10,644
1925	12	83,916	3	18,850	11,470	9	65,066	92,200			
1926	8	54,043	5	28,789	15,880	2	16,302	25,625	1	8,952	15,262
1927	19	154,700	7	51,294	27,450	9	72,936	104,300	3	30,470	49,752
1928	7	71,916	3	44,190	37,400				4	27,726	44,086
1929	8	65,313	2	23,614	19,800	5	32,603	49,200	1	9,096	15,180
1930	18	163,500	5	50,311	39,269	2	15,824	24,000	11	97,355	161,219
1931	14	150,949	9	108,968	85,413				5	41,981	69,528
1932	15	145,470	13	129,348	82,572	2	16,122	21,800			
1933	4	49,527	4	49,527	32,367						
1934	2	9,544				2	9,544	15,180			
1935	2	19,022							2	19,022	29,760
1936	8	63,428							8	63,428	104,860
1937	15	121,852							15	121,852	191,929
1938	24	181,366				6	39,196	56,100	18	142,170	227,982
1939	28	241,052	3	80,063	20,436	14	91,560	128,484	11	119,429	193,112
1940	53	444,727	6	68,943	61,222	31	227,275	334,600	16	148,500	238,352
1941	95	749,108	6	58,107	56,515	61	423,022	597,943	28	267,079	434,039
1942	724	5,392,848	11	101,847	81,290	652	4,678,880	6,842,689	61	612,121	952,381
1943	1,661	12,485,629	20	219,760	180,047	1,410	10,103,245	14,921,082	231	2,162,624	3,420,405
1944	1,463	11,403,163	48	461,291	330,311	1,175	8,455,475	11,857,797	240	2,486,397	3,954,957
1945	1,041	7,614,898	46	509,163	311,046	807	5,336,152	7,206,201	188	1,769,593	2,787,397
1946	83	645,706	9	76,719	84,667	66	487,354	728,583	8	81,633	120,900
1947	39	247,327	8	73,664	68,225	28	154,402	223,657	3	19,261	36,166
1948	24	158,915	1	15,350	10,513	17	92,049	155,863	6	51,507	87,693
1949	33	540,559							33	540,559	863,292
1950	26	404,617				3	26,854	43,500	23	377,763	608,593
1951	10	147,569	2	47,438	23,580	4	28,908	42,994	4	71,138	116,468

Source: American Bureau of Shipping, New York, N. Y.; published annually in *The Bulletin*.

No. 669.—UNITED STATES MERCHANT MARINE—SUMMARY: 1789 TO 1951

[For definition of "gross ton" see general note, p. 533. See also *Historical Statistics*, series K 94-98]

JUNE 30 (EXCEPT AS INDICATED)	NUMBER OF VESSELS			GROSS TONNAGE OF VESSELS (THOUSANDS)			
	Total	Steam and motor	All other	Total	Steam and motor	Sail- ing ¹	Canal boats and barges ²
1789 (Dec. 31)-----				202			202
1800 (Dec. 31)-----				972			972
1810 (Dec. 31)-----				1,425	1	1,424	
1820 (Dec. 31) ³ -----				1,280	22	1,258	
1830 (Dec. 31) ⁴ -----				1,192	64	1,127	
1840 (Sept. 30)-----				2,181	202	1,978	
1850-----				3,535	526	3,010	
1860-----				5,354	868	4,486	
1870-----	28,998	8,524	25,474	4,247	1,075	2,363	808
1880-----	24,712	4,717	19,995	4,068	1,212	2,366	490
1890-----	23,467	5,965	17,502	4,424	1,859	2,109	456
1900-----	23,333	7,055	16,280	5,165	2,658	1,885	622
1910-----	25,740	12,452	13,288	7,508	4,900	1,655	952
1915-----	26,701	15,948	10,753	8,389	5,944	1,384	1,061
1920-----	28,183	18,814	9,369	16,324	13,823	1,272	1,228
1925-----	26,367	18,637	7,730	17,406	14,976	1,125	1,304
1930-----	25,214	18,211	7,003	16,068	13,757	757	1,554
1935-----	24,919	18,495	6,424	14,654	12,535	441	1,677
1939-----	27,470	19,006	7,864	14,632	11,952	221	2,459
1940-----	27,212	19,504	7,708	14,018	11,353	200	2,466
1941 (Jan. 1)-----	27,075	19,382	7,693	13,722	11,047	182	2,493
1942 (Jan. 1)-----	27,325	19,471	7,854	13,860	11,072	166	2,621
1943 (Jan. 1)-----	27,612	19,974	7,638	16,762	14,052	2,508	
1944 (Jan. 1)-----	28,690	21,511	7,179	25,795	23,217	129	2,449
1945 (Jan. 1)-----	29,797	22,772	7,026	32,813	30,247	115	2,452
1946 (Jan. 1)-----	31,386	24,355	7,031	38,501	35,928	98	2,475
1947 (Jan. 1)-----	32,760	25,532	7,228	37,832	35,149	95	2,588
1948 (Jan. 1)-----	33,843	26,633	7,210	33,167	30,469	87	2,611
1949 (Jan. 1)-----	35,264	27,862	7,402	32,182	29,323	87	2,771
1950 (Jan. 1)-----	36,083	28,793	7,290	31,215	28,327	82	2,806
1951 (Jan. 1)-----	36,745	29,429	7,316	30,341	27,424	71	2,846

CLASSES	NUMBER OF VESSELS					GROSS TONNAGE OF VESSELS (THOUSANDS)				
	1941	1948	1949	1950	1951	1941	1948	1949	1950	1951
Total-----	27,075	33,843	35,264	36,083	36,745	13,722	33,167	32,182	31,215	30,341
By location:										
Atlantic and Gulf ³ -----	16,627	20,212	21,071	21,623	22,069	9,812	20,116	20,318	20,420	19,908
Pacific ⁴ -----	6,727	9,462	9,801	10,066	10,203	1,904	10,367	9,088	8,446	8,072
Northern lakes-----	2,023	1,920	1,964	2,026	2,043	1,641	2,079	2,076	1,628	1,555
Western rivers-----	1,698	2,249	2,428	2,363	2,430	305	603	698	721	736
By rig:										
Steam-----	3,796	5,279	5,020	4,795	4,551	9,814	28,401	27,225	26,272	25,390
Motor-----	15,586	21,354	22,842	23,998	24,878	1,233	2,067	2,099	2,055	2,038
Sailing-----	517	319	303	290	268	182	87	87	82	71
Unrigged-----	7,176	6,891	7,099	7,000	7,048	2,493	2,611	2,771	2,806	2,846

¹ Canal boats and barges included with sailing prior to 1868.² Decrease of tonnage arises principally from registered tonnage having been corrected in 1818, 1829, and 1830 by omitting all vessels with registers granted prior to 1815, which were presumed to have been lost at sea, captured, etc.³ Including Puerto Rico and Virgin Islands.⁴ Including Hawaii and Alaska.Source: Prior to 1942, Department of Commerce, Bureau of Marine Inspection and Navigation; thereafter, Treasury Department, Bureau of Customs; annual report, *Merchant Marine Statistics*.

MERCHANT MARINE

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No. 670.—U. S. MERCHANT MARINE—NUMBER AND GROSS TONNAGE OF VESSELS ON JAN. 1, 1951, BY YEAR OF BUILD

YEAR OF BUILD	Number	Gross tons	YEAR OF BUILD	Number	Gross tons	YEAR OF BUILD	Number	Gross tons
Total	36,745	30,340,701	1887	32	4,287	1919	542	230,066
Unknown	1,032	128,483	1888	47	6,498	1920	498	251,141
1849	1	19	1890	29	4,109	1921	310	245,343
1851	1	14	1891	37	5,978	1922	358	112,977
1852	1	14	1892	70	13,598	1923	403	126,721
1857	3	191	1893	56	10,228	1924	613	148,688
1862	1	36	1894	43	4,040	1925	650	140,338
1863	2	1,386	1895	35	3,803	1926	722	145,063
1864	1	225	1896	37	6,400	1927	802	215,645
1865	4	121	1897	67	29,532	1928	825	187,825
1866	5	1,196	1898	99	43,604	1929	865	170,708
1867	5	138	1899	108	46,700	1930	789	157,174
1868	6	1,647	1900	157	80,615	1931	548	125,414
1869	5	294	1901	182	62,402	1932	384	128,134
1870	2	3,706	1902	170	86,034	1933	219	52,148
1871	9	487	1903	173	76,946	1935	598	64,345
1872	8	461	1904	178	55,670	1936	791	148,559
1873	7	310	1905	231	105,836	1937	867	216,945
1874	7	884	1906	263	270,974	1938	700	170,224
1875	9	778	1907	266	278,982	1939	704	195,022
1876	8	447	1908	282	203,413	1940	901	385,690
1877	7	3,159	1909	251	137,226	1941	950	526,956
1878	11	3,661	1910	278	158,493	1942	1,509	3,440,552
1879	11	2,059	1911	349	108,752	1943	2,245	7,398,988
1880	11	2,761	1912	392	98,140	1944	2,257	5,951,051
1881	31	3,062	1913	415	128,798	1945	1,801	4,786,720
1882	34	2,134	1914	371	92,678	1946	1,523	602,225
1883	30	1,527	1915	375	73,854	1947	1,443	279,608
1884	36	3,327	1916	372	149,135	1948	1,292	234,712
1885	29	3,114	1917	554	214,070	1949	1,168	236,047
1886	29	2,012	1918	513	152,012	1950	861	194,370

Source: Treasury Department, Bureau of Customs; annual report, *Merchant Marine Statistics*.

No. 671.—U. S. MERCHANT MARINE—NUMBER AND GROSS TONNAGE OF VESSELS ON JAN. 1, 1951, BY TONNAGE GROUPINGS

TONNAGE GROUPINGS	TOTAL		STEAM VESSELS		MOTOR VESSELS		SAILING VESSELS		UNRIGGED VESSELS	
	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)
Total	36,745	30,341	4,551	25,390	24,878	2,033	268	71	7,048	2,846
5 to 49 tons	21,342	383	81	2	20,350	357	203	3	708	20
50 to 99 tons	2,658	188	201	16	2,102	146	16	1	339	25
100 to 499 tons	6,941	1,884	653	152	1,982	387	14	3	4,292	1,342
500 to 999 tons	1,677	1,099	152	106	155	102	12	10	1,358	881
1,000 to 2,499 tons	593	835	149	234	120	152	17	30	307	419
2,500 to 4,999 tons	340	1,290	180	707	113	416	6	23	41	143
5,000 to 9,999 tons	2,835	20,689	2,788	20,330	44	342	-----	-----	3	16
10,000 to 19,999 tons	353	3,838	341	3,706	12	132	-----	-----	-----	-----
20,000 tons and over	6	135	6	135	-----	-----	-----	-----	-----	-----

Source: Treasury Department, Bureau of Customs; annual report, *Merchant Marine Statistics*.

No. 672.—MERCHANT VESSELS LAUNCHED IN THE WORLD AND IN THE UNITED STATES: 1910 TO 1951

[**Vessels of 100 gross tons and over.** For definition of "gross ton" see general note, p. 533. Beginning 1941 sailing ships and nonpropelled craft are included for Great Britain and N. Ireland only. For 1939-1945, figures exclude information from enemy and enemy-occupied countries and Russia; for 1946-1949, figures exclude Germany and Russia. Figures for 1950 and 1951 include Germany, but exclude Russia, Poland, and China]

CALENDAR YEAR	WORLD				UNITED STATES	
	Total		Steam and motor			
	Number	Gross tons	Number	Gross tons	Number	Gross tons
1910-1914, average	1,533	2,739,079	1,180	2,631,770	162	252,804
1915-1920, average ¹	1,488	4,046,860	1,296	3,918,746	518	1,877,382
1921-1925, average	942	2,581,653	830	2,531,502	99	315,114
1926-1930, average	873	2,468,515	808	2,427,929	74	158,788
1931-1935, average	484	1,020,444	461	1,010,567	25	83,485
1936-1940, average	931	2,427,144	841	2,376,050	127	310,796
1941-1945, average	1,442	8,520,091	1,390	8,510,700	963	6,718,446
1946-1950, average	934	2,645,026	858	2,630,349	67	372,579
1938	1,119	3,033,593	1,029	2,975,042	105	201,261
1939	941	2,539,424	821	2,474,312	170	421,989
1940	495	1,754,198	399	1,707,028	167	879,410
1941	564	2,498,061	510	2,491,173	187	1,035,230
1942	1,359	7,828,705	1,300	7,815,369	861	5,070,820
1943	2,122	13,893,978	2,078	13,884,776	1,625	11,579,522
1944	1,822	11,182,310	1,738	11,160,503	1,261	9,339,067
1945	1,344	7,197,402	1,326	7,192,079	880	5,967,581
1946	747	2,127,421	600	2,114,702	96	501,294
1947	837	2,111,886	787	2,102,621	70	104,848
1948	997	2,332,604	872	2,309,743	49	126,418
1949	1,012	3,146,145	926	3,131,805	66	633,306
1950	1,075	3,507,073	1,013	3,492,876	52	437,031
1951	1,101	3,658,485	1,022	3,642,564	64	165,883

¹ Figures covering war period are for allied and neutral countries.

Source: Lloyd's Register of Shipping, London; *Annual Summary of Merchantile Shipbuilding of the World*.

No. 673.—MERCHANT MARINE OF THE WORLD AND OF THE UNITED STATES

[**Vessels of 100 tons and over.** Prior to 1919 tonnage figures are gross for steamers and net for sailing vessels, thereafter gross for both. Wooden vessels on Great Lakes and vessels on Caspian Sea excluded. Japanese sailing vessels and most sailing vessels belonging to Greece, Turkey, and southern Russia excluded. Figures for Philippine Islands included with United States, 1910-39. See general note, p. 533. Data not compiled during last war period]

YEAR	World total	United States	YEAR	World total	United States	YEAR	World total	United States
	1,000 tons	1,000 tons		1,000 tons	1,000 tons		1,000 tons	1,000 tons
1895	25,086	2,165	1920	57,314	16,049	1947	84,366	32,801
1900	28,957	2,750	1925	64,041	15,377	1948	81,074	29,602
1905	35,998	3,998	1930	69,608	14,046	1949	83,346	28,224
1910	41,915	5,059	1935	64,886	12,852	1950	85,303	27,898
1915	49,262	5,893	1939	69,440	12,003	1951	87,961	27,702

ITEM	NUMBER					THOUSANDS OF TONS (SEE HEADNOTE)					
	1920	1930	1939	1950	1951	1914	1920	1930	1939	1950	1951
World total	31,595	32,713	31,186	31,732	32,112	49,090	57,314	69,608	69,440	85,303	87,961
Steam and motor	26,513	29,996	29,763	30,852	31,226	45,404	53,905	68,024	68,509	84,583	87,245
Steel and iron	23,382	27,595	27,507	27,922	28,374	44,934	51,661	67,304	68,007	83,996	86,678
Wood and composite	3,131	2,401	2,256	2,930	2,852	470	2,244	720	503	587	567
Sailing and nonpropelled	5,082	2,717	1,423	880	886	3,086	3,400	1,584	930	720	716
Steel and iron	1,314	742	743	611	648	2,095	1,524	654	572	557	578
Wood and composite	3,768	1,975	680	269	243	1,590	1,885	930	358	163	138
United States	5,457	4,223	3,375	5,213	5,160	5,368	16,049	14,046	12,003	27,989	27,702
Steam and motor	4,110	3,517	2,958	4,953	4,909	4,330	14,574	13,202	11,490	27,513	27,331
Steel and iron	3,242	3,001	2,560	4,531	4,484	4,120	13,341	12,914	11,342	27,404	27,225
Wood and composite	868	516	398	422	425	210	1,234	288	148	109	106
Sailing and nonpropelled	1,347	706	417	260	251	1,038	1,475	844	513	385	371
Steel and iron	154	147	187	154	160	236	304	288	272	260	270
Wood and composite	1,193	559	230	106	91	803	1,171	556	241	125	101

Source: Lloyd's Register of Shipping, London; Appendix to *Lloyd's Register Book*.

23. Irrigation, Drainage, and Soil Conservation

(Sent to print May 7, 1952)

Irrigation.—The 17 Western States and Arkansas, Louisiana, and Florida are the States in which most of the irrigated land in the Nation is located. In these States a special census of irrigation was made as part of the 1950 Census of Agriculture. Information on acres irrigated, irrigation works, capital investment, and a number of other items was obtained from the irrigation companies, districts, and other organizations, and from farms that operate their own irrigation supply works. For the remaining eastern and midwestern States information on irrigation was limited to that reported in the farm census.

The definition of irrigated land in the 1950 Census was the net acreage of farm land to which irrigation water was actually applied during 1949. It did not include land that could be irrigated or that usually is irrigated, but that was not irrigated during 1949. Land in irrigated farms that was used for purposes such as roads and farmsteads, to which irrigation water was not applied, was excluded. Also excluded was irrigated land used for purposes other than farming, such as that in rural residential areas, cemeteries, parks, and golf courses.

Drainage.—Drainage works for farm lands are constructed primarily for three purposes, namely, (1) the reclamation or improvement of the land, (2) protection of the land against overflow, and (3) to rid the land of seepage from irrigation ditches or for control or prevention of alkali formation. Ninety percent of all drainage enterprises were organized for reclamation and improvement of land.

The farmers in the Eastern United States need drainage to take surplus rainfall off some of their lands. Most of this is gravity drainage, although pumps are sometimes used. In the Western States drainage is mainly for the purpose of taking seepage water off irrigated lands and to carry off alkali salts.

In the 1950 National Census of Drainage, in general, only those organized enterprises with 500 acres or more of drained farm land were included in the enumeration. A few irrigation enterprises of smaller size which had their own drainage works were also included. In previous Censuses (1910-1940) all organized enterprises draining farm lands were included in the enumeration regardless of size. Privately drained lands of less than 500 acres have not been enumerated in any of the four Drainage Censuses. The change in census procedure for 1950 materially reduced the number of enterprises enumerated, but affected very little the amount of drained land enumerated.

In taking the 1950 Census, differences in form of organization and management of drainage enterprises made it necessary for the Bureau of the Census to divide somewhat arbitrarily the 40 States with drainage enterprises into two groups: the 10 "county-drain" States and the 30 "drainage-district" States. The eight States with no drainage enterprises are the six New England States, Pennsylvania, and West Virginia. In the 10 "county-drain" States (Delaware, Indiana, Iowa, Kentucky, Michigan, Minnesota, North Dakota, Ohio, Oklahoma, South Dakota), statistics were gathered for the county as a unit, rather than for each separate enterprise as for the 30 "drainage-district" States. In most of the "county-drain" States, the management of drainage enterprises is under the county government. Generally, the maintenance work on existing ditches has been done by reorganizing the land of an earlier enterprise into a new project. Since the number of enterprises for "county-drain" States would be meaningless, the number was not obtained for these 10 States.

In the Western States most of the drained land is located in irrigation enterprises which were chartered to do both irrigation and drainage work under one organization. In the case of irrigation enterprises having their own drainage, the cost of construction and operation and maintenance of the irrigation works is usually far greater than that for drainage. Separate records are seldom kept for expenditures for drainage and irrigation. Data were not included in the 1950 Census of Drainage for cost, collections, and indebtedness of irrigation enterprises having their own drainage. Therefore, the data for 1950 are not fully comparable with those for earlier years.

Historical statistics.—See preface and historical appendix. Tabular headnotes (as "See also *Historical Statistics*, series F 56-59") provide cross-references, where applicable, to *Historical Statistics of the United States, 1789-1945*.

No. 674.—IRRIGATION ENTERPRISES—SUMMARY: 1910 TO 1950

[Data are for the 17 Western States, Arkansas, Louisiana, and, for 1950, Florida. Tables 674 and 676-679 relate to irrigation enterprises of all types, including those operated by individual farmers. They are based on reports of management of enterprises. An enterprise is defined as "an independent irrigation establishment owning or operating works for supplying water to agricultural land." 1950 data are preliminary. See also *Historical Statistics*, series F 56-59]

ITEM	CENSUS OF—				
	1910	1920	1930	1940	1950 ¹
Approximate land area.....	1,224,063	1,223,989	1,223,980	1,225,057	1,258,972
Farms (irrigated and nonirrigated) ²	1,776,046	1,916,391	2,062,813	1,897,845	1,069,447
Land in all farms ³	416,463	505,441	568,094	629,050	734,577
Irrigation enterprises:					
Enterprises.....	number	56,858	63,298	75,517	91,637
Area irrigated.....	1,000 acres	14,433	19,192	19,548	21,004
Investment in irrigation enterprises.....	1,000 dollars	321,454	697,657	892,756	1,052,049
Increase over preceding census.....	percent	359.2	117.0	28.0	17.8
Average per acre irrigated.....	dollars	22.27	36.35	45.67	50.00
Increase over preceding census.....	percent		63.2	25.6	9.7
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....	dollars	41.07	2.43	2.77	2.28
					4.89

¹ Includes Florida; see headnote.

² Represents redeterminations and therefore differs from figures shown for earlier years.

³ From Census of Agriculture.

⁴ Excludes cost of operation and maintenance for rice-growing districts in Gulf States; consequently figure is not comparable with those for later years.

Source: Department of Commerce, Bureau of Census; Sixteenth Census Reports, *Irrigation of Agricultural Lands*, and preliminary data from 1950 Census of Agriculture.

No. 675.—FARM DRAINAGE—ANNUAL COST AND FUNDS COLLECTED, FOR ALL DRAINAGE STATES: 1940 TO 1949

[See table 681 for States included. Data are preliminary]

FINANCIAL ITEMS	All drainage States, amount	30 STATES ¹		10 States, amount ²
		Number of enterprises reporting	Amount	
Cost of construction and operation and maintenance, 1940 to 1949	\$179,033,770	3,426	\$110,231,690	\$68,802,080
1940.....	11,118,467	1,513	6,196,439	4,922,028
1941.....	11,858,842	1,519	6,658,374	5,200,408
1942.....	11,622,551	1,518	6,723,109	4,809,442
1943.....	11,680,225	1,577	7,043,661	4,636,564
1944.....	13,754,850	1,582	8,135,637	5,610,213
1945.....	15,874,399	1,671	9,077,448	6,706,051
1946.....	18,868,027	1,853	11,645,339	7,222,088
1947.....	23,635,739	2,022	15,224,054	8,411,685
1948.....	29,103,462	2,133	19,222,181	9,881,281
1949.....	31,517,208	2,214	20,305,448	11,211,760
Cost of new drainage works, 1940 to 1949	23,872,422	983	16,288,346	7,584,076
1940.....	292,905	28	211,662	81,243
1941.....	595,553	36	456,885	138,668
1942.....	688,304	38	485,030	183,334
1943.....	761,825	55	552,887	208,938
1944.....	847,874	58	555,754	262,120
1945.....	1,841,360	106	1,209,478	631,882
1946.....	2,656,197	175	1,845,545	810,652
1947.....	3,982,765	285	2,675,951	1,306,814
1948.....	5,480,198	334	3,811,074	1,668,524
1949.....	6,745,381	399	4,453,480	2,291,901
Funds collected for drainage, 1940 to 1949	209,919,061	3,471	144,415,544	65,503,517
1940.....	14,826,778	1,544	9,876,983	4,949,706
1941.....	16,059,107	1,516	10,964,080	5,095,018
1942.....	16,434,045	1,534	11,257,936	5,176,709
1943.....	16,604,413	1,549	11,745,320	4,859,093
1944.....	17,857,447	1,574	12,352,386	5,605,061
1945.....	18,893,508	1,650	13,748,025	6,144,883
1946.....	24,077,324	1,702	16,740,225	7,337,099
1947.....	25,669,339	1,968	18,062,647	7,606,692
1948.....	28,090,532	2,072	19,551,283	8,539,249
1949.....	30,405,968	2,107	20,116,051	10,289,917

¹ Largely States with organized drainage districts and other corporate and private enterprises.

² Largely county-drain States. See text, p. 555.

Source: Department of Commerce, Bureau of the Census; 1950 Census of Agriculture, preliminary report, *Drainage of Agricultural Lands*.

No. 676.—IRRIGATION ENTERPRISES—AREA IRRIGATED, 1939 AND 1949, AND CAPITAL INVESTED, 1940 AND 1950, BY STATES

[Data are for the 17 Western States and Arkansas, Florida, and Louisiana. Minus sign (−) denotes decrease. 1950 data are preliminary]

STATE	AREA IRRIGATED			CAPITAL INVESTED			Increase 1940-50	
	1949		Increase 1939-49	1950		Increase 1940-50		
	1939	Total		1940	Total			
Total for 20 States	Acres 21,136,101	Acres 26,248,508	Percent 100.0	Percent 24.2	Dollars 1,059,105,122	Dollars 1,887,070,003	Percent 78.2	
Arizona	653,263	979,014	3.7	49.9	83,526,608	137,575,193	7.3	
Arkansas	161,601	418,644	1.6	159.1	5,766,895	14,365,151	.8	
California	5,069,568	6,618,595	25.2	30.6	318,889,218	640,061,505	33.9	
Colorado	3,220,685	2,940,502	11.2	-8.7	106,849,343	161,306,063	8.6	
Florida	132,362	302,909	1.4	174.2	7,055,921	19,489,139	1.0	
Idaho	2,277,857	2,168,323	8.3	-4.8	102,585,798	120,973,554	6.9	
Kansas	99,980	140,992	.5	41.0	2,155,886	5,882,205	.3	
Louisiana	447,095	598,056	2.3	33.8	11,565,513	21,857,050	1.2	
Montana	1,711,409	1,809,908	6.9	5.8	67,352,505	82,000,490	4.3	
Nebraska	610,379	887,505	3.4	45.4	39,056,207	50,158,781	3.0	
Nevada	739,863	722,896	2.8	-2.3	16,906,790	20,249,426	1.1	
New Mexico	554,039	691,429	2.6	24.8	32,735,997	61,586,909	3.3	
North Dakota	21,615	35,750	.1	65.4	1,755,489	2,957,763	.2	
Oklahoma	4,180	44,189	.2	962.2	272,186	13,076,010	.7	
Oregon	1,040,176	1,338,226	5.1	27.6	50,961,251	74,360,976	3.9	
South Dakota	60,198	84,356	.3	40.1	5,395,610	6,617,914	.4	
Texas	1,045,224	1,148,115	12.0	201.2	66,441,376	144,645,556	7.7	
Utah	1,176,116	1,166,659	4.4	-8	41,890,532	56,539,426	3.0	
Washington	615,013	617,302	2.4	4.4	56,415,196	178,476,464	9.5	
Wyoming	1,486,498	1,475,069	5.6	-8	41,522,801	59,600,358	3.2	

Source: Department of Commerce, Bureau of the Census; 1950 Census of Agriculture, preliminary report, *Irrigation of Agricultural Lands*.

No. 677.—IRRIGATION ENTERPRISES—AREA IRRIGATED, 1929 AND 1939, AND CAPITAL INVESTED, 1930 AND 1940, BY PRINCIPAL DRAINAGE BASINS

[Data are for 17 Western States and Arkansas and Louisiana. Minus sign (−) denotes decrease]

PRINCIPAL DRAINAGE BASIN	AREA IRRIGATED			CAPITAL INVESTED			Increase 1930-40	
	1939		Increase 1929-39	1940		Increase 1930-40		
	1929	Total		1930	Total	Proportion of total		
Total for 19 States	Acres 19,547,544	Acres 21,003,739	Percent 100.0	Percent 7.4	Dollars 892,755,790	Dollars 1,052,049,201	Percent 100.0	
Red River (of the North)	2,099	4,493	(1)	114.1	20,925	130,566	(1)	
Missouri River	4,185,180	4,410,385	21.0	5.4	136,506,721	179,750,238	17.1	
Mississippi River, exclusive of Missouri River	902,560	927,594	4.4	2.8	31,831,673	37,101,932	3.5	
Gulf of Mexico streams other than Mississippi River and Rio Grande	662,958	902,392	4.3	36.1	28,578,193	30,498,361	2.9	
Rio Grande	1,504,726	1,521,578	7.2	-2.8	53,748,608	80,563,998	7.7	
Colorado River	2,537,124	2,638,120	12.6	4.0	132,350,247	155,800,882	14.8	
Whitewater Draw and Vamori Wash ¹	3,301	8,498	(1)	157.4	230,606	226,627	(1)	
Great Basin Drainage	2,036,033	2,073,727	9.9	1.9	67,579,074	59,698,865	5.7	
Columbia River	3,393,640	3,819,738	18.2	12.6	157,355,114	206,523,302	19.6	
Klamath River	187,991	271,038	1.3	44.2	9,430,566	10,430,941	1.0	
Sacramento-San Joaquin Delta and tributary streams	3,157,132	3,393,882	16.2	7.5	164,628,093	171,004,939	16.3	
Pacific Ocean streams, other than Colorado, Columbia, and Klamath Rivers and Sacramento-San Joaquin Delta and tributary streams	914,801	1,032,294	4.9	12.8	110,495,970	120,318,550	11.4	

¹ Less than 1/10 of 1 percent.

² Data for 1930 census are for Whitewater Draw and unidentified tributaries, and exclude the independent basin, Vamori Wash.

Source: Department of Commerce, Bureau of the Census; *Sixteenth Census Reports, Irrigation of Agricultural Lands*.

No. 678.—IRRIGATION ENTERPRISES—DAMS, RESERVOIRS, CANALS, PIPE LINES, AND WELLS, BY STATES: 1950

[Data are for the 17 Western States and Arkansas, Florida and Louisiana. Data are preliminary]

STATE	Diver-sion dams	Reser-voirs	RESERVOIRS WITH CAPACITY REPORTED		Canals	Pipe lines	WELLS			
			Reser-voirs	Total capacity			Flowing	Pumped		
			Number 50,101	Number 7,738			Number 6,998	Acre-feet 42,548,583		
Total (20 States)-----										
Arizona-----	562	269	237	3,625,629	4,898	316	245	4,361		
Arkansas-----	108	86	74	40,431	684	19	27	3,662		
California-----	4,706	1,687	1,507	8,711,658	20,188	10,091	572	72,163		
Colorado-----	7,713	1,182	1,105	2,021,343	18,833	251	1,451	4,088		
Florida-----	355	180	168	3,843	692	485	4,181	3,381		
Idaho-----	5,108	366	313	5,124,969	15,321	437	490	887		
Kansas-----	127	52	42	25,605	546	14	12	1,340		
Louisiana-----	319	61	56	31,249	3,675	61	844	7,590		
Montana-----	8,134	629	577	1,598,598	15,498	109	100	142		
Nebraska-----	488	117	96	133,034	4,628	90	100	7,176		
Nevada-----	4,046	202	176	687,179	3,390	124	293	254		
New Mexico-----	1,286	476	448	3,186,401	5,769	167	106	3,832		
North Dakota-----	15	11	6	1,101	92	7	-----	4		
Oklahoma-----	20	29	27	148,945	355	20	-----	160		
Oregon-----	6,218	528	470	2,369,138	8,305	573	148	2,770		
South Dakota-----	231	100	94	204,693	968	7	14	27		
Texas-----	439	570	508	1,402,689	9,892	758	163	15,065		
Utah-----	3,080	511	474	2,424,093	9,622	299	1,920	565		
Washington-----	1,859	224	205	6,436,541	3,977	1,515	87	2,098		
Wyoming-----	5,237	458	415	4,370,844	9,724	59	225	248		

Source: Department of Commerce, Bureau of the Census; 1950 Census of Agriculture, preliminary report, *Irrigation of Agricultural Lands*.

No. 679.—IRRIGATION ENTERPRISES—DAMS, RESERVOIRS, CANALS, PIPE LINES, AND FLOWING WELLS, BY PRINCIPAL DRAINAGE BASINS: 1940

[Data are for the 17 Western States and Arkansas and Louisiana]

PRINCIPAL DRAINAGE BASIN ¹	DAMS		RESERVOIRS		CANALS		Pipe lines	WELLS FLOWING	
	Diver-sion	Stor-age	Total	Capacity	Length	Capac-ity at main head-ing		Total	Yield
	Number 34,544	Number 4,607	Number 7,709	Acre-feet 33,787,382	Miles 127,533.7	Sec.-feet 612,021	Miles 28,584.9	Number 4,641	Gals. per min. 555,073
Total for 19 States-----									
Red River (of the North)-----	5	2	2	720	23.9	365	1.9	-----	-----
Missouri River-----	8,897	1,237	1,332	6,715,271	31,131.1	148,255	400.6	79	9,915
Mississippi River, exclusive of Mis-souri River-----	959	360	425	1,608,164	4,838.6	49,858	174.5	47	4,263
Gulf of Mexico streams other than Mississippi River and Rio Grande-----	196	204	436	334,176	4,569.8	18,860	221.0	576	43,504
Rio Grande-----	1,450	162	567	3,864,857	8,702.9	43,851	774.3	1,136	240,308
Colorado River-----	4,391	840	1,030	5,717,080	20,894.1	81,033	919.0	463	48,584
Whitewater Draw and Vamori Wash-----	158	6	18	74	26.0	484	4.9	6	765
Great Basin Drainage-----	4,263	462	766	3,781,588	10,757.6	57,049	984.7	1,608	118,499
Columbia River-----	11,208	590	614	7,517,123	27,535.0	121,457	3,181.4	374	65,579
Klamath River-----	670	52	60	1,165,143	1,904.3	9,179	52.8	3	42
Sacramento-San Joaquin Delta and tributary streams-----	1,497	358	1,310	2,681,435	15,202.8	72,735	7,437.1	47	3,403
Pacific Ocean streams, other than the Colorado, Columbia, and Klamath Rivers and Sacramento-San Joaquin Delta and tributary streams-----	850	334	1,149	401,801	1,947.6	7,995	14,432.7	212	20,211

Source: Department of Commerce, Bureau of the Census; Sixteenth Census Reports, *Irrigation of Agricultural Lands*.

No. 680.—IRRIGATED LAND IN FARMS, BY STATES: 1939, 1944 AND 1949

[In 1940, the schedule called for land from which irrigated crops were harvested in 1939, and for land irrigated in 1939 and used for grazing or pasture; in 1945 and 1950, for total land in farms irrigated in 1944 and 1949. 1950 data are preliminary]

DIVISION AND STATE	FARMS REPORTING			ACRES IRRIGATED			BY SPRINKLER, 1949	
	1939	1944	1949	1939	1944	1949	Farms reporting	Acres irrigated
United States	299,604	288,195	305,060	17,982,830	20,539,470	25,775,845	25,049	639,987
The North	13,656	12,448	18,348	667,820	801,979	1,258,321	5,272	110,320
The South	32,639	29,008	39,086	1,601,384	2,372,296	4,550,881	3,098	137,894
The West	253,309	246,739	247,626	15,713,626	17,305,195	19,906,693	16,679	391,773
New England	333	922	1,581	2,846	12,153	31,450	933	18,783
Maine	33	3	123	143	100	2,299	111	2,131
New Hampshire	7	10	51	25	63	622	38	556
Vermont		2	22		6	303	14	259
Massachusetts	231	874	1,053	2,049	11,355	18,507	483	6,706
Rhode Island	10	9	52	109	133	1,631	42	1,402
Connecticut	57	24	280	520	496	8,088	245	7,689
Middle Atlantic	1,446	1,415	2,208	17,260	30,792	54,616	1,783	42,030
New York	567	646	888	5,948	10,316	19,248	732	16,381
New Jersey	580	675	1,033	7,956	11,712	28,117	811	19,058
Pennsylvania	299	94	287	3,356	8,764	7,251	240	6,611
East North Central	1,491	1,206	2,110	10,833	12,795	36,237	1,883	31,205
Ohio	658	463	458	4,536	4,178	5,706	431	5,134
Indiana	138	123	164	685	830	5,339	160	5,285
Illinois	72	47	139	307	368	1,510	119	1,400
Michigan	462	347	995	2,960	2,860	13,901	898	11,894
Wisconsin	163	226	354	2,345	4,569	9,781	275	7,492
West North Central	10,381	8,905	12,449	636,881	806,239	1,136,018	673	18,302
Minnesota	216	27	274	2,965	210	4,235	248	4,097
Iowa	88	54	76	2,253	1,197	1,380	54	1,149
Missouri	140	118	142	960	1,113	2,089	121	931
North Dakota	479	206	304	19,975	22,814	35,294	9	318
South Dakota	967	708	807	54,073	52,895	78,069	12	391
Nebraska	6,913	7,156	9,680	473,775	631,762	876,259	153	8,295
Kansas	1,578	636	1,166	82,872	90,248	138,686	76	8,121
South Atlantic	4,119	4,199	6,516	128,037	224,446	381,044	2,410	89,777
Delaware	2	3	10	7	22	404	10	404
Maryland	17	8	30	67	287	697	20	568
District of Columbia		16	2		45	13	2	13
Virginia	53	31	71	687	1,419	2,817	64	2,762
West Virginia	23	11	9	270	42	40	3	14
North Carolina	37	19	96	246	229	2,083	82	1,883
South Carolina	14	5	84	411	62	6,408	53	1,793
Georgia	26	14	139	158	423	3,161	92	2,249
Florida	3,947	4,092	6,075	126,191	221,917	365,421	2,084	80,091
East South Central	111	211	180	891	1,113	6,950	121	1,794
Kentucky	46	34	67	205	230	485	48	346
Tennessee	21	21	35	311	393	1,012	29	971
Alabama	37	153	34	281	487	367	31	300
Mississippi	7	3	44	94	3	5,086	13	177
West South Central	28,409	24,598	32,390	1,472,456	2,146,737	4,162,837	567	46,323
Arkansas	1,529	2,220	3,060	159,412	288,665	422,107	40	1,676
Louisiana	7,037	7,185	7,437	413,969	555,619	576,775	36	1,067
Oklahoma	275	74	466	4,437	2,237	34,071	76	2,072
Texas	19,568	15,110	21,427	804,038	1,320,216	3,129,884	415	41,508
Mountain	135,414	127,963	122,280	9,912,862	10,703,164	11,642,524	976	43,324
Montana	15,087	12,997	13,457	1,587,602	1,555,480	1,716,792	250	15,520
Idaho	29,898	28,571	29,413	1,595,048	2,026,280	2,137,237	344	9,995
Wyoming	8,637	7,793	7,831	1,284,027	1,383,873	1,431,767	14	581
Colorado	29,766	28,054	27,121	2,467,548	2,698,579	2,872,388	183	8,194
New Mexico	15,811	14,299	12,661	436,402	554,640	655,287	53	1,822
Arizona	10,339	9,634	7,822	575,464	736,027	963,560	51	4,011
Utah	22,612	23,543	21,126	911,135	1,124,081	1,137,995	48	1,766
Nevada	3,264	3,072	2,819	755,636	674,204	727,498	33	1,435
Pacific	117,895	118,776	125,346	5,800,764	6,602,031	8,324,169	15,703	348,449
Washington	17,426	15,974	16,928	493,982	528,153	589,035	3,411	67,852
Oregon	16,159	15,597	17,663	1,030,228	1,129,056	1,306,810	4,140	98,769
California	84,310	87,205	90,755	4,276,554	4,952,819	6,428,324	8,152	181,828

Source: Department of Commerce, Bureau of the Census; 1945 Census of Agriculture, special release on irrigated land in farms, and preliminary data from 1950 Census of Agriculture.

No. 681.—NUMBER OF DRAINAGE ENTERPRISES, LAND IN ENTERPRISES, AND FINANCIAL DATA, BY STATES: 1920 TO 1950

[1950 data are preliminary]

STATE	Approximate land area in 1950 (acres)	NUMBER OF DRAINAGE ENTERPRISES ¹		LAND IN DRAINAGE ENTERPRISES, TOTAL ACRES (NET) ¹				FUNDS COLLECTED JAN. 1, 1940 TO DEC. 31, 1949 ²		
		1940	1950	1920	1930	1940	1950	Number of enterprises reporting	Amount (\$1,000)	
		(3)	(3)	(3)	(3)	(3)	(3)	(3)	209,919	
Total 40 States	1,819,883,520	(3)	(3)	65,495,038	84,408,093	86,967,039	102,672,507	(3)	209,919	
Total 30 States ⁴	1,481,769,600	9,386	13,846	22,281,273	36,687,719	39,872,238	50,648,852	3,471	144,416	
Alabama	32,689,920	1	10	25	39,640	318,931	28,045	76,671	72	
Arizona	72,688,000	21	25	39,640	318,931	298,633	197,268	2	22	
Arkansas	33,712,000	346	848	3,479,591	4,631,155	4,592,738	4,701,341	129	10,213	
California	100,313,600	1,056	2,070	1,108,319	2,233,714	2,667,194	2,553,459	152	25,129	
Colorado	66,510,080	294	638	171,656	306,719	408,322	624,252	47	1,198	
Florida	34,727,680	948	1,890	1,637,073	5,954,934	5,699,022	6,075,530	217	25,509	
Georgia	37,429,120	52	55	65,452	84,255	84,374	96,259	22	132	
Idaho	52,972,160	250	380	64,642	375,464	659,136	435,887	44	1,698	
Illinois	35,798,400	1,695	1,433	3,909,049	5,032,082	5,091,364	5,370,825	872	17,889	
Kansas	52,549,120	132	122	93,856	257,169	258,113	356,993	60	1,040	
Louisiana	28,903,680	1,128	714	2,266,328	3,655,483	4,219,624	12,161,940	408	15,072	
Maryland	6,327,680	126	93	441	1,601,444	2,988,496	183,337	323,815	30	139
Mississippi	30,348,800	273	441	1,601,444	2,988,496	2,890,618	3,023,744	367	9,218	
Missouri	44,304,640	286	318	2,596,204	3,150,022	3,087,063	3,147,484	223	14,046	
Montana	93,361,920	239	407	168,682	167,620	372,661	201,225	25	482	
Nevada	49,064,320	195	475	607,730	879,459	916,181	821,097	77	1,924	
New Jersey	70,264,960	44	85	15,940	162,980	153,373	251,154	5	194	
New Mexico	4,814,080	—	5	224	140,219	176,292	305,885	11,206	39	
New York	77,767,040	169	14	—	—	—	245,121	5	393	
North Carolina	31,422,080	246	413	542,828	679,236	825,576	1,128,500	251	1,416	
Oregon	61,041,600	338	1,095	4,000	211,182	348,825	418,873	50	1,983	
South Carolina	19,580,160	24	45	140,031	208,249	204,366	249,011	37	383	
Tennessee	26,855,040	155	151	363,671	593,560	601,592	615,838	48	437	
Texas	168,648,320	180	467	2,166,128	2,883,356	4,218,850	5,794,786	96	11,688	
Utah	52,701,440	240	471	113,823	156,052	202,058	303,052	29	919	
Virginia	25,581,520	2	30	—	15,042	15,714	45,460	28	111	
Washington	42,743,040	375	531	94,924	307,242	405,709	431,291	120	1,416	
Wisconsin	35,011,200	396	206	794,569	892,713	761,203	514,700	83	605	
Wyoming	62,403,840	175	190	95,474	245,703	312,662	325,596	19	582	
Total 10 States ⁵	338,113,920	(3)	(3)	43,213,765	47,720,374	47,094,801	52,023,655	(3)	65,504	
Delaware	1,265,920	(3)	(3)	9,087,183	10,214,014	305,014	352,547	—	120	
Indiana	23,171,200	(3)	(3)	—	—	10,121,952	11,017,709	(3)	6,733	
Iowa	35,830,400	(3)	(3)	5,224,478	6,137,649	6,164,344	6,734,863	(3)	13,704	
Kentucky	25,669,760	(3)	(3)	358,480	585,625	465,270	959,802	(3)	802	
Michigan	36,494,080	(3)	(3)	9,729,171	9,180,851	8,978,386	10,194,439	(3)	21,325	
Minnesota	51,205,760	(3)	(3)	9,232,700	11,474,683	10,990,400	11,269,962	(3)	15,992	
North Dakota	44,834,560	(3)	(3)	1,240,328	1,094,142	1,376,041	1,565,055	(3)	904	
Ohio	26,318,080	(3)	(3)	8,107,204	8,165,494	7,729,267	8,923,362	(3)	5,117	
Oklahoma	44,341,120	(3)	(3)	12,150	170,158	197,646	298,853	(3)	276	
South Dakota	48,983,040	(3)	(3)	222,062	697,758	676,472	706,973	(3)	471	

See footnotes at end of table.

No. 681.—NUMBER OF DRAINAGE ENTERPRISES, LAND IN ENTERPRISES, AND FINANCIAL DATA, BY STATES: 1920 TO 1950—Continued

STATE	CAPITAL INVESTED PRIOR TO DATE OF CENSUS (\$1,000)			COST OF CONSTRUCTION AND OPERATION AND MAINTENANCE, JAN. 1, 1940, TO DEC. 31, 1949 ²				OUTSTANDING INDEBTEDNESS DEC. 31 OF YEAR PRECEDING CENSUS ³			
				Total		Cost of new works (for lands not pre- viously drained)		1940		1950	
	1920	1930	1940	Number of enter- prises re- porting	Amount (\$1,000)	Number of enter- prises re- porting	Amount (\$1,000)	Number of enter- prises re- porting	Amount (\$1,000)	Number of enter- prises re- porting	Amount (\$1,000)
Total 40 States	372,274	680,250	691,725	(3)	179,034	(3)	23,872	4,038	137,745	(3)	63,423
Total 30 States ⁴	188,850	394,682	411,479	3,426	110,232	983	16,288	1,664	126,542	696	52,893
Alabama											
Arizona	414	1,875	1,119	8	70	7	59	1	41	1	8
Arkansas	14,147	37,533	39,451	127	5,540	28	392	139	13,235	49	3,806
California	47,687	66,452	70,144	150	15,927	16	135	90	17,123	39	3,808
Colorado	1,082	4,359	4,890	47	773	5	23	38	1,853	13	217
Florida	13,847	45,488	43,357	207	18,603	63	2,707	94	32,296	51	12,760
Georgia	795	1,919	2,065	22	132	22	107	52	410	14	332
Idaho	1,669	5,112	7,567	44	906	12	133	33	1,906	19	563
Illinois	43,595	74,566	72,567	892	16,860	103	1,217	158	6,974	80	2,859
Kansas	937	2,701	3,734	60	1,117	10	279	20	1,806	14	325
Louisiana	9,022	20,763	23,362	392	16,652	142	5,316	140	10,708	80	8,685
Maryland											
Mississippi	7,076	23,601	23,260	345	5,703	156	441	233	6,688	92	3,052
Missouri	20,723	47,340	49,050	225	8,282	9	114	169	8,174	70	2,658
Montana	665	1,879	2,828	25	402	9	168	17	1,503	8	139
Nebraska	4,589	6,847	7,579	75	1,533	27	768	36	1,279	6	204
Nevada	118	1,350	1,338	5	194	2	62	5	649	1	4
New Jersey											
New Mexico	1,711	3,279	5,722	5	75	13	3,901	3	77	3	78
New York											
North Carolina	3,624	4,719	5,468	250	1,439	158	738	33	687	8	151
Oregon	200	4,166	5,482	50	2,176	17	477	30	1,782	19	841
South Carolina	582	1,265	1,241	33	310	27	207	24	636	7	40
Tennessee	2,926	6,367	6,502	26	271	23	250	133	1,898	3	3
Texas	5,701	12,003	14,047	89	9,534	32	1,822	64	4,574	24	10,872
Utah	1,005	4,772	4,869	30	887	13	20	18	2,769	4	31
Virginia		242	201	28	111	27	96	2	129		
Washington	1,397	4,638	5,333	131	1,541	24	204	54	490	44	105
Wisconsin	4,163	6,207	4,255	92	611	15	296	39	392	16	85
Wyoming	1,176	5,251	5,595	14	163	2	12	26	4,455	16	1,069
Total 10 States ⁵	183,424	285,568	280,245	(3)	68,802	(3)	7,584	2,374	11,203	(3)	10,529
Delaware											
Indiana	31,148	54,111	47,540	(3)	173	(3)	3	6	1		
Iowa	49,627	77,479	75,374	(3)	13,303	(3)	2,143	277	1,287	(3)	2,499
Kentucky	1,522	5,358	4,948	(3)	711	(3)	45	33	759	(3)	58
Michigan	24,684	37,677	40,412	(3)	20,236	(3)	2,556	673	810	(3)	2,477
Minnesota	42,017	64,140	65,576	(3)	18,311	(3)	1,595	768	6,035	(3)	3,774
North Dakota	2,208	3,149	3,673	(3)	890	(3)	245	5	184	(3)	183
Ohio	30,680	36,836	35,216	(3)	6,189	(3)	148	313	303	(3)	399
Oklahoma	76	2,284	1,971	(3)	299	(3)	62	13	262	(3)	197
South Dakota	1,461	4,535	5,079	(3)	483	(3)	20	1,133	(3)		722

¹ Including irrigation enterprises having their own drainage.

² Data for irrigation enterprises not included in 1950.

³ Not available.

⁴ Largely States with organized drainage districts and other corporate and private enterprises.

⁵ Largely county-drain States. See text, p. 555.

Source: Department of Commerce, Bureau of the Census; 1950 Census of Agriculture, preliminary report, *Drainage of Agricultural Lands*.

No. 682.—NUMBER AND AREA OF DRAINAGE ENTERPRISES CLASSIFIED BY SIZE:
1920 TO 1950

[1950 data are preliminary]

SIZE GROUP	Number of enterprises, 1950	AREA OF ENTERPRISES (ACRES) ¹						
		All drainage States			30 States ²			
		1920	1930	1940	1920	1930	1940	1950
Total	13,846	95,629,291	128,495,078	132,828,451	23,657,216	41,644,155	45,207,287	54,611,368
Under 100 acres	8,053	1,153,025	324,157	525,455	12,395	2,727	4,383	605,333
100 to 199 acres			1,040,664	1,446,870		12,057	19,498	
200 to 499 acres			5,222,615	5,984,023	7,093,485	99,112	147,705	220,974
500 to 999 acres	1,584	9,001,516	11,130,096	11,234,727	368,736	910,371	953,935	1,096,249
1,000 to 1,999 acres	1,306	29,522,536	34,074,000	(14,558,019)	3,183,867	4,998,968	1,726,342	1,960,005
2,000 to 4,999 acres	1,316			(20,511,078)			3,960,638	4,115,515
5,000 to 9,999 acres	651	13,357,936	15,865,002	16,387,515	2,820,328	4,484,862	4,542,720	4,538,729
10,000 to 19,999 acres	433			(16,964,180)			6,041,949	6,033,424
20,000 to 49,999 acres	270	28,826,149	35,075,951	(20,141,844)	9,423,712	14,708,991	10,047,299	8,084,363
50,000 to 99,999 acres	88	8,605,536	11,403,982	10,760,472	4,880,449	6,304,255	6,816,045	6,125,174
100,000 to 199,999 acres	24			(5,925,431)			3,794,141	3,304,555
200,000 to 499,999 acres	19	4,850,978	10,218,995	(3,155,493)	2,868,617		2,954,853	6,575,535
500,000 acres and over	12		3,378,199	4,123,882			4,123,882	12,172,486

¹ The sum of the areas in the individual enterprises without deduction for area in more than one enterprise (overlapped).² Largely States with organized drainage districts and other corporate and private enterprises. See text, p. 555.Source: Department of Commerce, Bureau of the Census; 1950 Census of Agriculture, preliminary report, *Drainage of Agricultural Lands*.

No. 683.—FEDERAL RECLAMATION IRRIGATION PROJECTS—ACREAGE AND CROP VALUE: 1939 TO 1950

[Acreage in thousands and value in thousands of dollars. Includes projects constructed by United States and those for which supplemental water is furnished from storage works built by United States. Net area in cultivation and value exclude data for lands on Government projects cropped without irrigation]

YEAR	ENTIRE AREA				WARREN ACT LAND ¹			REGULAR AND SUPPLEMENTAL WATER PROJECTS			
	Irrigable acreage	Irrigated acreage	Net area in cultivation	Crop value	Irrigated acreage	Net area in cultivation	Crop value	Irrigable acreage	Irrigated acreage	Net area in cultivation	Crop value
1939	3,890	3,141	3,078	114,083	1,218	1,175	40,313	2,493	1,923	1,903	73,770
1940	4,180	3,391	3,316	117,789	1,238	1,177	37,690	2,769	2,153	2,139	80,098
1941	4,046	3,339	3,380	159,886	1,140	1,202	49,486	2,850	2,199	2,178	110,400
1942	4,849	3,881	3,822	272,049	1,603	1,562	116,429	3,392	2,278	2,260	155,620
1943	4,854	4,055	4,014	388,671	1,633	1,615	170,607	2,882	2,422	2,399	218,064
1944	4,940	4,164	4,139	411,226	1,695	1,664	186,543	2,916	2,469	2,475	224,033
1945	5,030	4,163	4,196	435,184	1,748	1,731	202,039	2,958	2,417	2,445	232,545
1946	5,151	4,322	4,397	530,624	1,808	1,830	250,913	3,088	2,514	2,567	279,711
1947	5,167	4,462	4,554	555,420	1,832	1,871	254,946	3,092	2,630	2,683	300,475
1948	5,380	4,559	4,700	534,624	1,894	1,939	257,463	3,221	2,665	2,700	277,161
1949	5,679	4,821	4,916	516,329	2,028	2,067	238,981	3,296	2,792	2,849	277,348
1950	6,025	5,077	5,189	578,238	2,220	2,271	290,554	3,393	2,857	2,918	287,684

¹ Warren Act contracts are those which provide for sale of excess water to irrigation districts, i. e., water over and above project requirements. Lands served are usually located outside project proper. The act also provides for joint construction and financing of irrigation works by Federal Government and irrigation districts.Source: Department of the Interior, Bureau of Reclamation; *Annual Report of Secretary and official records*.

FEDERAL RECLAMATION PROJECTS

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**NO. 684.—FEDERAL RECLAMATION IRRIGATION PROJECTS—CHARGES AND RENTALS,
BY PROJECT, TO JUNE 30, 1951**

[In thousands of dollars. Cumulative from inception of program; data by project for current fiscal year only]

STATE AND PROJECT	CONSTRUCTION WATER-RIGHT CHARGES ¹			OPERATION AND MAINTENANCE CHARGES			RENTALS OF IRRIGATION WATER		
	Amount due	Amount repaid ²	Due and unpaid	Amount due	Amount repaid	Due and unpaid	Amount due	Amount repaid	Due and unpaid
	Total	94,426	93,095	1,331	56,283	56,122	161	22,203	22,109	94
Arizona: Gila:									
Salt River	133	133					76	64	12
Arizona-California:									
Yuma and Yuma Auxiliary	101	113	3	180	135	15	4	4	
California: Central Valley:							864	864	
Orland	54	56	7	93	90	3	1	1	
Colorado:							(3)	(3)	
Colorado-Big Thompson									
Fruitgrowers Dam	3	3							
Grand Valley	65	71							
Mancos				6	6				
Pine River	28	19	34	5	5				
Uncompahgre	30	30							
Idaho: Boise	876	830	79	37	37	(3)	146	73	73
Boise Anderson Ranch	32	32	(3)						
Minidoka	389	368	21	128	128		58	58	
Rathdrum Prairie-Post Falls									
Montana: Bitter Root	18	18		3	3				
Frenchtown	5	5	5						
Huntley	35	35							
Milk River	148	87	319	81	81	(3)			
Missoula Valley				2	2				
Missouri River Basin				6	3	3			
Sun River	99	99		8	8				
Montana-North Dakota:									
Lower Yellowstone	85	85							
Nebraska: Mirage Flats							1	1	
Missouri River Basin							18	13	
Nebraska-Wyoming:									
North Platte	519	475	153	79	79	(3)			
Nevada: Humboldt	34	34							
Newlands	86	86	(3)						
Truckee Storage	25	25							
New Mexico: Carlsbad	64	64		13	13				
Tucumcari							103	103	
New Mexico-Texas:									
Rio Grande	223	223		900	900				
Oklahoma: W. C. Austin	72	60	12	87	87				
Oregon: Baker	6	6							
Burnt River	22	15	7						
Deschutes	13	13					194	194	
Umatilla	32	7	461				12	12	
Vale	74	74		6	6				
Oregon-California:									
Klamath	131	127	8	315	312	3	210	203	7
Oregon-Idaho: Owyhee	420	218	210	561	424	137			
South Dakota:									
Belle Fourche	72	72		4	4				
Rapid Valley	25	25		5	5				
Texas: Balmorhea	3	3		6	6				
Utah: Hyrum	13	16							
Moon Lake	40	40							
Newton	9	9							
Ogden River	64	74		9	9		50	50	
Provo River									
Salt River Basin	88	88							
Sanpete	9	11							
Scofield	5	5							
Strawberry Valley	68	68							
Washington:									
Columbia Basin							15	15	
Okanogan	13	10	6						
Yakima	375	379	2	338	338	(3)			
Wyoming: Kendrick							14	14	
Riverton	80	80	(3)	2	2				
Shoshone	129	128	(3)	2	2		43	43	(3)
Total, prior years	89,611	88,685	(4)	53,439	53,439		20,345	20,345	

¹ Construction water-right charges equal amount for amortization of allocated construction charges.

² Includes charges maturing in prior years, but paid during fiscal year 1951.

³ Less than \$500.

⁴ Charges due and unpaid on June 30, 1950 (\$926,000) included with current fiscal year data distributed by project.

Source: Department of the Interior, Bureau of Reclamation; official records.

No. 685.—FEDERAL RECLAMATION IRRIGATION PROJECTS—ACREAGE AND CROP VALUE,
BY PROJECT: 1950

STATE AND PROJECT	PROJECTS ENTIRELY CONSTRUCTED BY BUREAU			PROJECTS FURNISHED SUPPLEMENTAL WATER FROM WORKS CONSTRUCTED BY BUREAU			ALL SPECIAL AND WARREN ACT CONTRACTORS RECEIVING WATER FROM BUREAU WORKS		
	Irrigable acreage	Acreage in cultivation	Crop value (\$1,000)	Irrigable acreage	Acreage in cultivation	Crop value (\$1,000)	Irrigable acreage	Acreage in cultivation	Crop value (\$1,000)
Total ¹	2,753,288	2,275,696	\$250,289	603,755	536,426	\$31,649	2,626,342	2,271,358	\$290,554
Arizona: Gila	27,538	12,804	1,371				1,056	1,041	126
Salt River	239,802	225,152	36,999				96,651	84,802	23,701
Arizona-California: Yuma	71,159	58,040	11,347						
California:									
All-American Canal:									
Imperial I. D.							517,000	440,000	56,931
Coachella Division ²	48,000	31,000	13,438						
Central Valley							697,569	504,962	103,014
Orland	19,307	17,075	1,793						
Colorado: Fruitgrowers Dam				2,662	2,177	251			
Grand Valley ³	40,471	29,462	3,010				7,950	7,649	1,450
Maneos ⁴				7,872	6,970	280			
Pine River				33,715	31,679	781	614	610	9
Uncompahgre	70,828	58,244	3,301				15,488	15,183	423
Idaho: Boise	223,480	189,744	14,710				125,303	116,900	11,035
Lewiston Orchards ⁵	3,508	2,770	657						
Minidoka	218,795	193,630	18,089	112,000	107,660	5,852	707,870	685,576	44,960
Preston Bench ⁵				4,324	4,150	303			
Rathdrum Prairie:									
Hayden Lake ⁶									
Post Falls ⁴	3,109	2,108	132				1,087	514	31
Montana: Bitter Root ⁶	16,665	16,492	548						
Buffalo Rapids ⁴	24,620	21,345	1,069						
Dodson Pumping Unit ⁴	1,173	1,173	64						
Frenchtown	4,935	3,510	139						
Huntley	32,508	16,774	1,130						
Intake	881	435	24						
Milk River	123,379	61,971	3,271						
Missoula Valley ⁴				977	636	17			
Missouri River Basin:									
Yellowstone Div. Sav-age Unit	2,216	2,016	50						
Sun River	97,248	85,958	2,143						
Montana-North Dakota:									
Lower Yellowstone	57,200	49,114	2,776						
Nebraska: Mirage Flats ⁴	11,598	11,092	676						
Nebr.-Wyo.: N. Platte	235,872	180,945	10,184					139,864	133,904
Nevada: Humboldt				40,012	28,414	1,575			8,463
Newlands	69,781	52,376	2,054						
Truckee Storage									
New Mexico: Carlsbad	25,055	19,007	3,282	28,793	23,213	1,564			
Tucumcari	42,321	31,563	1,110						
N. Mex.-Tex.: Rio Grande	155,000	149,112	42,805						
N. Dak.: Buford-Trenton ⁴	7,915	7,625	373						
Oklahoma: W. C. Austin	47,810	46,856	3,461						
Oregon: Baker				7,312	7,255	212			
Burnt River				15,291	15,260	457			
Deschutes	50,000	46,523	5,224	46,713	42,784	3,925			
Umatilla	18,531	12,066	459	14,030	10,179	669	1,057	906	66
Vale	32,000	31,150	1,840						
Oregon-California: Klamath	85,429	74,654	8,701						
Oregon-Idaho: Owyhee	105,154	96,036	9,597					86,694	70,974
S. Dak.: Belle Fourche	59,129	54,493	1,982					13,800	13,110
Rapid Valley ⁴									6,082
Texas: Balmorhea ⁴				8,916	8,406	202			
Utah: Hyrum				10,191	6,938	1,090			
Moat Lake				6,460	5,760	341			
Newton ⁴				72,608	60,044	1,298			
Ogden River				2,225	1,884	125			
Provo River				22,841	15,929	1,253			
Sanpete				46,609	42,158	2,895			
Scofield ⁴				12,717	11,546	319			
Strawberry Valley	41,340	38,132	2,356	15,609	15,009	818	3,837	3,732	236
Weber River									
Wash.: Columbia Basin	7,025	4,353	527	90,791	90,861	7,391			
Okanogan	5,342	3,955	1,172						
Yakima	261,962	211,772	37,936						
Wyoming: Kendrick	11,933	8,772	135				191,573	163,633	26,936
Riverton	54,804	47,065	2,015						
Shoshone	98,405	71,437	3,233				2,046	1,994	72

¹ In addition, the Bureau is prepared to supply water to 41,125 acres for which no crop details were reported. Excludes 105,983 acres of temporarily suspended, other leased and water rental lands (crop value \$5,744,967).² Includes 16,306 acres irrigated from privately constructed facilities.³ Orchard Mesa Irrigation District is a private project reconstructed with Government funds.⁴ Water conservation and utilization project. ⁵ Private project reconstructed with Government funds.

Source: Department of the Interior, Bureau of Reclamation; 1950 Crop Summary and Related Data, Federal Reclamation Projects.

FEDERAL RECLAMATION PROJECTS

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No. 686.—HYDROELECTRIC PLANTS ON RECLAMATION PROJECTS, OPERATING AND UNDER CONSTRUCTION, AS OF DECEMBER 31, 1951

STATE AND PROJECT	Plant	Year of initial operation	Present name-plate capacity (k.w.)	Ultimate name-plate capacity (k.w.)
Total			4,237,027	17,648,477
Constructed by Bureau of Reclamation:				
Operated by Bureau, total				
Arizona-Nevada: Boulder Canyon	Hoover ²	1936	4,048,700	4,359,700
Davis Dam	Davis	1951	1,034,800	1,332,300
Arizona-California: Parker	Parker	1942	225,000	225,000
California: Central Valley	Keswick	1949	120,000	120,000
Yuma	Shasta	1944	75,000	75,000
Colorado: Colorado-Big Thompson	Siphon Drop	1926	379,000	379,000
Idaho: Boise	Estes	1950	1,600	1,600
Minidoka	Green Mountain	1943	45,000	45,000
New Mexico: Rio Grande	Marys Lake	1951	21,600	21,600
South Dakota: Missouri River Basin	Anderson Ranch	1950	8,100	8,100
Washington: Columbia Basin	Black Canyon	1925	27,000	40,500
Yakima	Boise Diversion	1912	1,200	1,200
Wyoming: North Platte	Minidoka	1909	1,500	1,500
Kendrick	Elephant Butte	1940	13,400	13,400
Missouri River Basin	Angostura	1951	24,300	24,300
Riverton	Grand Coulee ⁴	1941	1,200	1,200
Shoshone	Prosser ⁵	1932	1,974,000	1,974,000
Operated by others, total	Guernsey	1927	2,400	2,400
Arizona: Salt River	Lingle	1919	4,800	4,800
Colorado: Grand Valley	Seminole	1939	1,400	1,400
Nevada: Newlands	Kortes	1950	32,400	32,400
Oregon: Deschutes	Pilot Butte	1925	36,000	36,000
Utah: Strawberry Valley	Heart Mountain	1948	1,600	1,600
Washington: Yakima	Shoshone	1922	5,000	5,000
Constructed and operated by water users organizations, total			5,600	5,600
Arizona: Salt River			30,827	30,827
Colorado: All-American	Arizona Falls ⁶	1913	850	850
Oregon: Klamath	Cross Cut ⁷	1914	5,100	5,100
Constructed and operated by Army Engineers, total ¹²	Roosevelt	1909	15,400	15,400
Montana: Fort Peck	S. Consolidated ⁸	1912	1,600	1,600
Under construction by Bureau of Reclamation, total	Palisades	1932	3,000	3,000
Alaska: Eklutna	Lahontan	1911	1,640	1,640
California: Central Valley	Cove ⁹	1946	1,640	1,640
Colorado: Colorado-Big Thompson	Spanish Fork ¹⁰	1908	1,550	1,550
Idaho: Palisades	Rocky Ford	1916	187	187
Montana: Missouri River Basin			72,500	77,300
Hungry Horse	Chandler ¹¹	1919	600	600
Wyoming: Kendrick	Horse Mesa ⁹	1927	30,000	30,000
Missouri River Basin	Mormon Flat ⁹	1926	7,000	7,000
Under construction by Army Engineers, total ¹²	Stewart Mountain ⁹	1930	10,400	10,400
North Dakota: Missouri River Basin	Drop No. 3 ¹⁰	1941	4,800	9,600
South Dakota: Missouri River Basin	Drop No. 4 ¹⁰	1941	19,200	19,200
Garrison	"O" Canal Drop ¹¹	1938	500	500
Ft. Randall			85,000	185,000
Gavins Point	Fort Peck	1943	85,000	185,000
Oahe	Eklutna	1934	807,750	807,750
	Folsom	1934	30,000	30,000
	Nimbus	1934	162,000	162,000
	Flatiron	1954	13,500	13,500
	Polehill	1953	69,000	69,000
	Palisades	1953	33,250	33,250
	Canyon Ferry	1957	114,000	114,000
	Hungry Horse	1953	50,000	50,000
	Alcova	1952	285,000	285,000
	Boysen	1954	36,000	36,000
		1952	15,000	15,000
	Garrison	1955	400,000	400,000
	Ft. Randall	1953	320,000	320,000
	Gavins Point	1956	100,000	100,000
	Oahe		425,000	425,000

¹ Includes 942,900 kilowatt capacity of 24 additional plants authorized but not under construction.² Power plant units operated by power allottees under agency contract. ³ Only 27,000 kilowatts authorized.⁴ Power marketed by Bonneville Power Adm. Continuous operating capacity 12,000 kilowatts additional.⁵ Prosser will be removed when Chandler is constructed.⁶ Power plant constructed by Bureau of Reclamation with Salt River Valley Water Users' Association funds.⁷ Unit No. 3 installed in Pacific Power and Light Company's Cove No. 2 plant.⁸ Three plants: (a) Spanish Fork (upper), (b) Spanish Fork (lower), (c) Payson.⁹ Salt Water Valley Water Users, Association's plant. ¹⁰ Imperial Irrigation District's plant.¹¹ Enterprise Irrigation District's plant. ¹² Power marketed by Bureau of Reclamation.

Source: Department of the Interior, Bureau of Reclamation; official records.

No. 687.—GROWTH OF CONSERVATION DISTRICTS, BY FISCAL YEARS, TO JUNE 30, 1951

[Basic soil conservation district legislation has now been enacted in all of the 48 States and 4 of the Territories and possessions. Each of these laws contains an effective date after which soil conservation districts could be organized by local farmers and operators. A soil conservation district is a political subdivision of State which is determined by petition and referendum of farmers residing in area, and approved by State Soil Conservation Committee. Districts, in most cases, have authority to solicit Federal, State, county, and private assistance in carrying on their soil and water conservation program within the area. On request of local governing body of each soil conservation district, Department of Agriculture provides technical and other assistance to districts, through its several agencies. These memorandums of understanding form basis on which any departmental assistance is provided to district for use on farms and ranches within district. After basic memorandum with Department has been signed, Soil Conservation Service signs a supplemental memorandum with each district governing body requesting assistance, to cover activities which Soil Conservation Service will help district to carry out]

YEAR ENDING JUNE 30	DISTRICTS ORGANIZED		TOTAL AREA IN DISTRICTS		DISTRICTS WITH SUPPLEMENTAL MEMORANDUMS	
	Each year	Cumulative total	New districts and additions	Cumulative total	Each year	Cumulative total
	Number	Number	1,000 acres	1,000 acres	Number	Number
1938	69	69	36,107	36,107	34	34
1939	92	161	52,339	88,446	79	113
1940	153	314	101,306	189,752	120	233
1941 ¹	241	555	145,091	334,843	201	434
1942	230	785	122,727	457,570	219	653
1943	116	901	60,102	517,672	159	812
1944	213	1,114	102,819	620,491	171	983
1945 ²	232	1,346	120,368	740,859	221	1,204
1946 ³	292	1,638	143,119	883,977	223	1,427
1947	251	1,889	118,901	1,002,969	315	1,742
1948	144	2,033	111,035	1,114,003	174	1,916
1949	131	2,164	64,700	1,178,703	158	2,074
1950	121	2,285	74,721	1,253,484	133	2,207
1951	88	2,373	51,626	1,305,110	122	2,329

¹ Includes wind-erosion districts and grazing districts for 1941 and subsequent years.

² Totals at end of each year hereafter are net, including corrections and adjustments made during year.

³ Includes Imperial irrigation district, California.

Source: Department of Agriculture, Soil Conservation Service; *Report of Chief of Soil Conservation Service*.

No. 688.—CONSERVATION PRACTICES NEWLY APPLIED IN CONSERVATION DISTRICTS, WITH SOIL CONSERVATION SERVICE ASSISTANCE, FISCAL YEARS: 1948 TO 1951

[See headnote, table 687]

PRACTICES	Unit	1948	1949	1950	1951	Cumulative to June 30, 1951 ¹
Contour farming	Acres	3,183,501	3,352,922	3,491,511	3,185,039	25,678,134
Cover cropping	do	2,572,410	2,614,797	3,111,387	2,809,720	16,122,902
Stubble mulching	do	6,302,316	6,611,273	7,140,297	6,893,178	41,780,837
Strip cropping	do	747,178	692,995	829,200	880,383	6,584,904
Seeding range and pasture	do	1,811,417	1,358,856	1,876,832	2,306,365	9,332,913
Woodland management	do	2,178,428	3,077,106	3,391,551	3,068,859	16,200,920
Farm and ranch ponds	Number	30,388	31,208	37,780	37,843	215,435
Tree planting ²	Acres	86,643	107,057	126,784	167,435	781,225
Terraces	Miles	87,263	96,621	100,612	78,006	791,551
Diversions	do	4,883	5,126	5,892	5,420	30,901
Farm drainage	Acres	1,089,730	1,103,412	1,161,402	1,173,582	6,237,941
Irrigation land preparation	do	217,673	254,905	315,519	384,600	1,537,148
Improved water application	do	527,638	562,667	617,606	616,371	3,419,847
Combined treatment	do	21,576,654	22,115,560	26,071,342	25,596,642	140,404,405

¹ These data are for first-time application only and do not include duplication of acreage for reapplication or maintenance of those same practices year after year.

² Includes acreage of windbreak planting.

Source: Department of Agriculture, Soil Conservation Service; *Report of Chief of Soil Conservation Service*.

SOIL CONSERVATION

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No. 689.—SOIL CONSERVATION DISTRICTS—SUMMARY, BY STATES: CUMULATIVE TO JUNE 30, 1951

[See headnote, table 687]

STATE OR OTHER AREA	Date district law became effective	Dis-tricts organized ¹	APPROXIMATE AREA AND FARMS WITHIN ORGANIZED DISTRICTS			Districts having memo. of understanding with D. A. ²	Active conserva-tion plans ³	Treated area ⁴
			Total area	Farms and ranches	Land in farms			
			Number 2,373	1,000 acres 1,305,110	Number 4,886,487	Number 874,036	Number 2,332	1,000 acres 140,404
Total.		2,338	1,297,617	4,826,611	871,353	2,300	877,072	246,212
Cont. U. S.								140,196
Alabama	Mar. 18, 1939	12	32,090	223,369	19,068	12	42,114	6,963
Arizona	June 16, 1941	47	1,276	8,047	1,276	47	3,142	760
Arkansas	July 1, 1937	60	32,742	182,263	16,588	58	38,521	6,224
California ⁵	June 26, 1938	70	13,821	56,637	9,688	67	12,844	2,351
Colorado	May 6, 1937	94	38,647	38,908	22,113	93	8,822	8,575
Connecticut	July 18, 1945	7	2,535	19,371	1,273	7	1,825	212
Delaware	Apr. 2, 1943	3	1,266	9,296	923	3	918	159
Florida	June 10, 1937	52	26,203	54,606	11,636	50	12,549	4,457
Georgia	Mar. 23, 1937	25	36,522	220,130	23,298	25	64,109	12,584
Idaho	Mar. 9, 1939	29	18,912	21,817	7,489	27	6,677	2,598
Illinois	July 9, 1937	95	32,116	194,822	30,225	95	22,960	3,906
Indiana	Mar. 11, 1937	52	12,866	95,531	10,936	50	10,746	1,562
Iowa	July 4, 1939	99	34,170	207,191	34,170	99	25,060	4,570
Kansas	Apr. 10, 1937	103	52,107	137,839	48,512	103	37,636	11,350
Kentucky	June 11, 1940	111	22,535	210,092	17,874	110	32,322	4,078
Louisiana	July 27, 1938	26	27,948	128,558	9,994	26	19,261	3,811
Maine	Mar. 25, 1941	15	16,485	39,745	4,369	15	5,767	786
Maryland	June 1, 1937	23	6,099	40,210	4,043	22	8,941	1,303
Massachusetts	June 28, 1945	15	5,025	36,915	2,078	15	3,073	357
Michigan	July 23, 1937	65	23,344	142,190	15,041	65	12,628	1,504
Minnesota	Apr. 26, 1937	52	16,405	80,249	14,913	49	11,662	2,103
Mississippi	Apr. 4, 1938	74	30,349	263,881	19,616	74	43,018	7,121
Missouri	July 23, 1943	25	7,714	51,195	7,563	24	5,092	908
Montana ⁶	Feb. 28, 1939	77	78,510	33,452	40,566	76	7,426	15,258
Nebraska	May 18, 1937	87	48,250	111,845	47,753	87	28,393	8,664
Nevada	Mar. 30, 1937	21	41,637	1,495	3,389	21	981	164
New Hampshire	May 10, 1945	10	5,775	18,786	2,017	10	2,944	407
New Jersey	July 1, 1937	8	4,785	26,143	1,817	8	3,756	432
New Mexico	Mar. 17, 1937	60	53,139	25,830	37,934	68	8,340	17,824
New York	July 20, 1940	38	18,869	106,637	12,884	38	16,271	2,243
North Carolina	Mar. 22, 1937	28	28,901	268,413	17,634	28	49,414	5,161
North Dakota	Mar. 16, 1937	79	43,126	69,644	38,760	78	16,550	9,652
Ohio	May 1, 1941	82	23,694	205,187	20,603	82	16,439	2,305
Oklahoma	Apr. 15, 1937	82	43,020	162,535	35,205	81	48,873	11,713
Oregon	Apr. 7, 1939	35	12,156	16,391	6,071	35	2,930	1,513
Pennsylvania	July 2, 1937	28	12,326	82,086	7,023	27	10,404	1,249
Rhode Island	Apr. 26, 1943	3	677	3,608	265	3	716	90
South Carolina	Apr. 17, 1937	36	19,580	147,745	11,022	36	28,257	4,791
South Dakota	July 1, 1937	50	27,282	48,095	27,161	50	19,201	10,895
Tennessee	Mar. 10, 1939	38	11,155	113,567	8,749	36	18,520	2,529
Texas ⁶	Apr. 24, 1939	163	155,674	363,807	126,171	153	80,258	40,448
Utah	Mar. 23, 1937	43	40,822	25,926	10,862	43	5,950	3,440
Vermont	Apr. 18, 1939	13	5,931	26,490	3,930	13	4,708	935
Virginia	Apr. 1, 1938	22	21,949	142,799	14,048	22	22,463	3,908
Washington	Mar. 17, 1939	67	33,710	80,022	13,406	66	13,033	5,313
West Virginia	June 12, 1939	14	15,279	97,380	8,698	14	19,449	2,584
Wisconsin	July 1, 1937	62	30,880	167,646	22,511	62	19,083	2,985
Wyoming	May 22, 1941	38	23,113	8,630	14,213	37	3,144	2,965
Alaska	Mar. 25, 1947	8	4,104	1,215	131	6	121	16
Hawaii	May 19, 1947	8	1,418	2,003	581	7	355	93
Puerto Rico	July 1, 1946	17	1,886	55,508	1,886	17	5,474	370
Virgin Islands	June 1, 1946	2	85	1,150	85	2	326	49

¹ For specific procedure on organization of soil conservation districts, see respective State soil conservation district law. By provision of most State district laws, State soil conservation committee has responsibility for organization of districts. Local district governing bodies administer affairs of each individual district.² Soil Conservation Service furnishes technical and other assistance to practically all districts that have entered into memorandums of understanding with Department of Agriculture.³ Includes complete farm conservation plans being carried out by farmers in cooperation with districts, as planned. Cancellations caused by death, change in ownership, or mutual consent have been deducted. Data on plans and treated area included only work done through farmer-district cooperative agreements since Aug. 1937 with assistance of Soil Conservation Service.⁴ Includes Imperial irrigation district.⁵ Includes 23 State cooperative grazing districts.⁶ Includes 7 wind-erosion districts.

Source: Department of Agriculture, Soil Conservation Service; Report of Chief of Soil Conservation Service.